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ICBM- School of Business Excellence
Hyderabad

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MANAGERIAL DECISION UNCERTAINTIES IN VUCA SPECTRUM

Lt Col (Dr.) Jyotirmaya Satpathy¹ and Prof. (Dr.) Ahalya Hejmadi²¹Double MPhil, PhD (Triple), DLitt (Quadruple), (Limca World Record Holder in Academics), Faculty, Academics Department, National Defence Academy, Pune²PhD, Professor, Department of Behavioural Sciences and Psychology, University of Maryland University College, Adelphi, Madison, USA**ABSTRACT**

Any model of choice making in VUCA spectrum accounts for verdicts that data to mind is deferred, perceptive courses take time and dispensation is boisterous. Peter Drucker once opined, 'Whatever a entrepreneur does, (s) he does through choice making in VUCA spectrum'. Choices are made for future which is uncertain. Factors that aid choices are dynamic in nature and are constantly changing. Deciding to decide, choosing to choose, deciding to choose and choosing to decide. These are the four 'bordered boundaries' where a business entrepreneur has to arrive at an optimal business choice. Choice makers, across industries, are making in VUCA spectrum complex choices that involve optimizing trade-offs to make right business choices. Time is consumed to weigh merits and demerits of all the alternatives. Issue is how to optimize business choice-making in VUCA spectrum? Learning mindset is very significant for a choice maker and it is one of the key strategies for success. Excelling in a VUCA environment requires a learning mindset. Eyes and its movement play an significant role in spectrum of choice making in VUCA spectrum as well as to analyze one's mindset. This paper attempts to review studies on eye movements to understand his/her learning mindset in view of choice making in VUCA spectrum. Focus is on comparing observations by eyes to theoretical predictions concerning choice making in VUCA spectrum. Paper takes cues from Orquin - Loose model of 'attention and choice' in choice making in VUCA spectrum to replicate research. Empirical observations reveal role of eye movements in business choices by analyzing choice makers' learning capability. Results indicate that repetitive choice making in VUCA spectrum is subject to vicissitudes over time. There are physiological processes that derive prognostic choices. To test hypotheses this study conducted an experiment to fragment eye movement pathway into fixations and saccades and summary measures of the same.

Keywords: Optimal Business Choice, Eye Movements, Fixations, Saccades and Choice

INTRODUCTION

Business world is journeying through stimulating times. Reality is fluctuating and sprouting uninterruptedly quicker than ever. Alterations in international order have positioned significant effect on business patterns athwart cost - effective taxonomies spread over inclusive parsimonies. Entrepreneurial social order is now at a crossroad; to continue to do what it has done from its comfort zone or step back to inventively progress hominoid schema in a qualitatively diverse direction and path. With onset of globalisation, visible and invisible forces are interchangeable, world is experiencing a turmoil wherein economics plays a prime - role driven by science, commerce, philosophy, genetics, heredity, medicine, to list a few. Neuroscience with entrepreneurial science has witnessed spread in Neuromanagement at dawn of this Century. Neuroscience combines theory and methods to study entrepreneurial choice-making. This is with focus on use of value representations to describe choice behaviour that challenge empirical results. Each revision unswervingly goads differing evidence. This is reflection of mix of volatility, uncertainty, complexity and ambiguity fueled by neuroscience. There are yet unsolved problems in (entrepreneurial) cognition; how does Entrepreneur decide in a state of vacillation, Risk and Probability? How does Entrepreneur decide in state of VUCA (Uncertainty, Vulnerability, Complexity and Ambiguity)? Entrepreneur has to take choices with inadequate data. It is significant to understand intricacy of entrepreneurial mind associated with executive functions. Choice - making is an intense, complexly arena that explores how mind and eyes absorb data, recognise and frame problematic situations to choose appropriate responses. In order to explain neural basis of choice making, ability to process alternatives and choose optimal course of action, especially in entrepreneurial context, research combines methods to build models for answering choice questions (Satpathy, J. et al; 2018).

Mind and eyes structures suggest that it considers various sources of data before making choice. Mind and eyes imaging technologies have stimulated neuro (entrepreneurial) studies with bandwidth of choices. How is (entrepreneurial) choice making processes carried out in mind and eyes? Paper highlights growing interest in exploring potential links between human biology and management in explaining human behaviour. Major effort is towards understanding how Entrepreneurs' deal with responses to complications in judgement dynamics. Interchangeably using 'Psychological' data and 'cognitive and neuromanagement' data, this paper regards as

‘psychological’ any data that go beyond standard ‘choice data’. Neuro - tracing and imaging techniques are beginning to reveal structural anatomy of neural circuits in unprecedented detail. Using Kowlerian Model, we examine empirically eye movements in choice - making to clarify ‘cerebral simulation’. This highlights growing interest in exploring potential links between biology and management in explaining entrepreneurial behaviour. Cross-fertilisation scan encourages a synergistic methodology (Satpathy, J. et al; 2018).

BACKGROUND

Everyday life is full of choices and choice makings. From a normative perspective, assessment of individual choices is concerned with logic of choice making and rationality and invariant choice making it leads to. Recent robust choice efforts have formally integrated uncertainty into choice making process. Choices are an inevitable part of human activities. People often fail to design ‘rational’ choices. When faced with complex choice, individuals engage in simplifying strategies. Adaptive choice making in real-world contexts relies on strategic simplifications of choice problems. Expansion of neuro management parallels development of cognitive science. Research investigates neural bases of choice predictability and value, central parameters in model of expected utility. Neuro - multiple - systems methodology to choice - making, in turn, influences management, a perspective strongly rooted in organisational management and neuroscience.

Genes influence choice making. Choice making is regarded as cognitive process resulting in selection of belief or course of action among possibilities. Developments in data technology and advances in socio - genetics present challenges to choice entrepreneurs in terms of providing informed consent. Socio - genetic mechanisms are complex and involve uncertainties. Why does choice making differ? It is noteworthy that certain proportions of entrepreneurs do not provide anomalous responses, choosing alternatives with higher expected utility, thus appearing to be ‘rational.’ All these pose possibility that entrepreneurs will not be ‘informed’ enough to facilitate good informed consent in choice-making (Satpathy, J. et al; 2018).

Advances in science, commerce, philosophy, genetics, heredity, medicine and other fields are ushering in era of ‘custom-made preclusion,’ allowing exceptional exactitude in calculating careful thought and testing in choice making. Key questions arise about how choice aids can optimally present data. Some questions relate to how data should be accessible to inform choices. This implies that hard-wired genetic influences play a significant role in determining choices. Choice philosophies, as assessment of behaviour of entrepreneurs facing nonstrategic uncertainty, are scarce to date wherein interest in and use of genetic designs is increasing. ‘Genetic locus’ is the construct that combines multiple aspects (Satpathy, J. et al; 2018).

OBJECTIVE

There are unexplained snags in (entrepreneurial) reasoning. This is in spite of several having evidence that vertebrate conjectural solution (Satpathy; 2015). What are the insinuations of neuro (entrepreneurial) management? The unsolved concerns; how does Entrepreneur decide in in state of VUCA? How do entrepreneurs make scientific choices? How does mind (via. eyes) compute and represent speculative ideas?

The **objective** of this paper is

- Identify entrepreneurs who were experiencing ‘hypotension’ or ‘hypertension’.
- Check out their blood **hematological monikers** in assessing response of entrepreneurs to various bio - functional situations.
- Advocate for **eye movement observations** through which Entrepreneur goes about making choices.

NEUROMANAGEMENT - PERSPECTIVES

How do we make a choice? Many choice makers have a tendency to seek more data than required to make a good choice. When too much data is sought and obtained, one or more of several problems can arise. A delay in choice occurs because of time required to obtain and process extra data. This delay could impair effectiveness of choice or solution. Data overload will occur. In this state, so much data is available that choice-making ability actually declines because data in its entirety can no longer be managed or assessed appropriately. A major problem caused by data overload is forgetfulness. When too much data is taken into memory, especially in a short period, some data (often that received early on) will be pushed out.

If further proof were needed of the vanity of management, neuro-management provides one more piece of evidence. Neuromanagement seeks to explain human choice-making, ability to process multiple alternatives and choose an optimal course of action. It studies how management behaviour shape understanding of mind and guide models of management via. Neuroscience, experimental and neuro management and cognitive and organisational management. As research in choice-making behaviour becomes computational, it incorporates methodologies from theoretical biology, computer science and mathematics. Deciphering mind - environment

transactions requires mechanistic understandings of neurobiological processes that implement value-dependent choice-making. Humans define goals for data processing in computers, whereas goals for biological minds are determined by need for survival in uncertain and competitive environments. What then are the coherent mind dynamics underlying prediction, control and choice-making?

Neuro - management choice-making can be regarded as a mental process (cognitive process) resulting in selection of a course of action among several alternative scenarios. Every choice-making process produces a final choice making. Process must be regarded as a continuous process integrated in interaction with environment. Assessment is concerned with logic of choice making, rationality and invariant choice making it leads to. This reflects more than compensatory interaction of choice making-related regions. Specific mind systems potentiate choice makings depending on strategies, traits and context. Therefore, choice making is a reasoning or emotional process which can be rational or irrational, based on explicit assumptions or tacit assumptions. This leads to formulation of a 'neuro - management choice making paradox'.

Neuromanagement has bridged the disparate fields of management and management. Neuromanagement has primarily challenged the standard management assumption that choice making is a unitary process-a simple matter of integrated and coherent utility maximization. The goal is a mathematical theory of how mind implements choices that is tied to behaviour. This theory is likely to show some choices for which rational-choice making theory is a good approximation (particularly for evolutionarily sculpted or highly learned choice makings), provide a deeper level of distinction among competing neuro alternatives and provide empirical inspiration to incorporate nuanced ideas about endogeneity of preferences, individual difference, emotions and endogenous regulation. Research has begun to investigate central parameters viz. neural bases of choice predictability and value in theory of expected utility.

We start with the premise that most basic choices we make (in form of choice makings or effort allocation) can be traced back in structure of macro-scale mind activity, as measured with modern neuroimaging apparatus. Typically, such responses involve many regions in mind (from mid - mind to prefrontal cortices, through parietal and basal ganglia structures), whose precise function in terms of motivational processes depends upon context (specific task the mind is solving). This 'context-dependency' expresses itself through (induced) specific plasticity of these mind networks, in parallel to phasic and tonic changes in neuromodulatory activity. In turn, this macro-scale reconfiguration of mind networks subtends learning and yield (mal-) adaptive behaviour. In other words, it is very likely that goal-directed behaviour emerges from interactions that shape spatio-temporal dynamics of macro-scale mind networks. This means that understanding mechanics of motivational processes from multimodal observation of mind activity (electrophysiology, fMRI) and neuro measurements (explicit choice makings, reaction times, autonomic arousal signals, grip force) poses exciting challenge of quantitatively relating data processing to mind effective connectivity.

How are organisational and management choices making processes carried out in mind? Do we interpret research findings when neurological results conflict with self-report? Knowing how mind is working explains little about what mind produces; what we think, what we believe and how we craft choices.' What are the general implications of neuro management? Neuroscience techniques permit to look inside mind while it experiences outcomes and crafts choices. Neuromanagement uses techniques to craft choices and examine implications. Central argument is that choice-making is at core of all entrepreneurial functions and future of any organization lies on vital choices made. Choice usually involves three steps: recognition of a need, dissatisfaction within oneself (void or need), choice to change (fill void or need) and conscious dedication to implement the choice. However, there are certain critical issues coupled with factors such as uncertainties, multiple objectives, interactive complexity and anxiety make choice making process difficult. At times when making a choice is complex or there are many interests at stake, then we realize the need for strategic choice-making.

Questions that need to be answered include; how to choose in tough situations where stakes are high, and there are multiple conflicting objectives? How should we plan? Why do projects often take longer and cost more than planned? How can we deal with risks and uncertainties involved in a choice? How can we create options that are better than the ones originally available? How can we become better choice makers? What resources will be invested in choice - making? What are the potential responses to a particular problem or opportunity? Who will make this choice? Every prospective action has strengths and weaknesses; how should they be evaluated? How will they decide? Which of the things that could happen would happen? The choice has been made. How can we ensure it will be carried out? Unfortunately, these are the questions neuroeconomists suspect are most crucial for understanding complex human behaviours.

RESEARCH METHODOLOGY

Measures of mind and eyes and eyes activity allow us to determine if evaluation process is centralised or if different mind and eyes and eyes systems compete to influence final choice. fMRI can precisely localize mind and eyes and eyes areas activated when subjects perform various human processes. Ability to measure and link mind and eyes and eyes activity to human processes, constructs, choices and behaviours has highlighted potential of mind and eyes and eyes research for social sciences. fMRI focuses on formulating research question, designing fMRI protocol, analyzing data and interpreting / reporting results. Methodology includes use of neuro choice tasks and application of neuro - scientific analyses and functional neuro-imaging techniques (fMRI). Juxtaposition of Damasio's hypothesis with a cognitive model of neuro - management choice making is preliminary to a possible model of emotional neuro - management choice making.

DESIGN PARAMETERS

A total number of 80 (N = 80) entrepreneurs were chosen for the study. They were randomly chosen from, existing serving as well as retired, administrators in Indian Armed Forces. The distribution of entrepreneurs as per cohort is as under:-

Table-1: Population Monikers

Age Profile (Years)	Gender	Population
25 - 40	Male	35
40 - 55	Male	12
55 - 70 ⁺	Male	02
25 - 40	Female	14
40 - 55	Female	11
55 - 70 ⁺	Female	06

Total (N) = 80

BLOOD MONIKERS

General passage of blood provides functional supply to all body tissues. It transmits oxygen to cells and picks up carbon dioxide and waste products. Systemic circulation carries oxygenated blood from left ventricle, through arteries, to capillaries in tissues of body. Blood carries oxygen to the mind. This oxygen nourishes neurons. Mind establishes an algorithm of costs and benefits when arranging a matrix for choice dynamics.

Table-2: Blood Pressure Monikers

Age Profile (Years)	Gender	Population	Recommended	Detected	Remark
25 - 40	Male	35	121 +/- 2/ 82 +/- 2	134 / 99	Highest
40 - 55	Male	12	125 +/- 4/ 83 +/- 2	132 / 95	High
55 - 70 ⁺	Male	02	121 +/- 2/ 82 +/- 2	130 / 85	High
25 - 40	Female	14	121 +/- 2/ 82 +/- 2	132 / 98	Highest
40 - 55	Female	11	125 +/- 4/ 83 +/- 2	132 / 97	High
55 - 70 ⁺	Female	06	131 +/- 4/ 87 +/- 2	130 / 86	High

(Figures have been averaged to their round - figure)

INTERPRETATION (BLOOD PRESSURE MONIKERS)

Mind depends on blood supply to function properly. However, high blood pressure causes several problems to the mind thereby impairing choice processes. It is detected that all the respondents who reported with case of hypertension were in the High-risk category. The male and female respondents in the age bracket of 25 – 40 years suffered the most. This is presumably due to professional pressures. This can be attributed to the race in the entrepreneurial world to achieve targets, milestones and keep pace with globalisation. Respondents with case of hypertension reported that the pressure to achieve targets was taking a toll on their cognitive ability. Due to hypertension, they reportedly have muscular pains, giddiness, headache, migraine, muscular - skeletal ache and related symptoms. All these added to their state of absenteeism or presenteeism. The bottom line is that their efficiency and effectiveness declined considerably and were unable to match their potential competency (Satpathy, J. et al; 2018).

HEMATOLOGICAL MONIKERS
CUMULATIVE DATA
ABNORMAL OBSERVATIONS

TABLE – 3
ABNORMAL OBSERVATIONS : MALE SUBJECTS
(COMPARATIVE ROUNDED - OFF AVERAGE RECORDINGS)

INVESTIGATION	25 – 40 Years	40 – 55 Years	55 – 70 Years	NORMAL RANGE
	RESULT	RESULT	RESULT	
Blood Sugar Fasting	50 mg / dl	51 mg / dl	54 mg / dl	60 - 100
Blood Sugar Post - Prandial	150 mg / dl	107 mg / dl	153 mg / dl	< 140
Blood Sugar Random	199 mg / dl	213 mg / dl	196 mg / dl	< 200
Urea	41 mg / dl	49 mg / dl	35 mg / dl	15 – 40
Creatine	0.3 mg / dl	1.6 mg / dl	1.9 mg / dl	0.5 – 1.0
Sodium	148 mEq / L	147 mEq / L	147 mEq / L	130 - 145
Potassium	3.1 mEq / L	5.7 mEq / L	5.9 mEq / L	3.5 – 5.0
Lipid T - Cholesterol	213 mg / dl	219 mg / dl	224 mg / dl	< 200
Lipid Tri - Glyceride	154 mg / dl	111 mg / dl	156 mg / dl	60 - 150
Low Density Lipo Protein	132 mg / dl	139 mg / dl	139 mg / dl	60 - 130
Very Low Density Lipo Protein	39 mg / dl	44 mg / dl	44 mg / dl	00 - 36
High Density Lipo Protein	64 mg / dl	68 mg / dl	63 mg / dl	40 - 60
S Bilirubin Total	1.9 mg / dl	1.7 mg / dl	1.5 mg / dl	0.1 - 1.2
S Bilirubin Direct	0.8 mg / dl	0.4 mg / dl	0.4 mg / dl	< 0.3
S Bilirubin Indirect	1.4 mg / dl	1.4 mg / dl	1.4 mg / dl	0.1 – 1.0
Aspartate Trans Amines (AST)	44 IU / L	42 IU / L	41 IU / L	15 - 40
Alanine Trans Amines (ALT)	43 IU / L	49 IU / L	43 IU / L	15 - 40
Creatine Phosphate K	31	41	38	M : 6 - 37
CPK - Muscular / Mind	27	36	31	F : 5 - 27
GGT	12 IU / L	21 IU / L	21 IU / L	
T - Protein	7.3 g / dl	6.9 g / dl	8.4 g / dl	6 - 8
Albumin	5.9 g / dl	5.6 g / dl	5.7 g / dl	3.5 - 5.5
Globulin	3.9 g / dl	3.2 g / dl	3.7 g / dl	1.7 - 3.2

Source: Military Hospitals, Ministry of Defence, India

N = 35

N= 12

N=2

TABLE – 4
ABNORMAL OBSERVATIONS : FEMALE SUBJECTS
(COMPARATIVE ROUNDED - OFF AVERAGE RECORDINGS)

INVESTIGATION	25 – 40 Years	40 – 55 Years	55 – 70 Years	NORMAL RANGE
	RESULT	RESULT	RESULT	
Blood Sugar Fasting	56 mg / dl	52 mg / dl	47 mg / dl	60 - 100
Blood Sugar Post - Prandial	132 mg / dl	159 mg / dl	178 mg / dl	< 140
Blood Sugar Random	194 mg / dl	198 mg / dl	190 mg / dl	< 200
Urea	42 mg / dl	56 mg / dl	44 mg / dl	15 – 40
Creatine	1.4 mg / dl	1.6 mg / dl	1.4 mg / dl	0.5 – 1.0
Sodium	151 mEq / L	151 mEq / L	145 mEq / L	130 - 145
Potassium	5.1 mEq / L	5.2 mEq / L	5.1 mEq / L	3.5 – 5.0
Lipid T - Cholesterol	192 mg / dl	179 mg / dl	178 mg / dl	< 200
Lipid Tri - Glyceride	162 mg / dl	171 mg / dl	148 mg / dl	60 - 150
Low Density Lipo Protein	176 mg / dl	165 mg / dl	156 mg / dl	60 - 130

Very Low Density Lipo Protein	82 mg / dl	42 mg / dl	34 mg / dl	00 - 36
High Density Lipo Protein	63 mg / dl	51 mg / dl	69 mg / dl	40 - 60
S Bilirubin Total	1.7 mg / dl	1.4 mg / dl	1.3 mg / dl	0.1 - 1.2
S Bilirubin Direct	1.1 mg / dl	0.4 mg / dl	3.1 mg / dl	< 0.3
S Bilirubin Indirect	1.4 mg / dl	1.4 mg / dl	2.3 mg / dl	0.1 – 1.0
Aspartate Trans Amines (AST)	42 IU / L	42 IU / L	44 IU / L	15 - 40
Alanine Trans Amines (ALT)	41 IU / L	41 IU / L	43 IU / L	15 - 40
Creatine Phosphate K	47	47	45	M : 6 - 37
CPK - Muscular / Mind	28	29	34	F : 5 - 27
GGT	23 IU / L	12 IU / L	12 IU / L	
T - Protein	9 g / dl	9 g / dl	8.9 g / dl	6 - 8
Albumin	5.1 g / dl	5.6 g / dl	5.2 g / dl	3.5 - 5.5
Globulin	3.6 g / dl	3.9 g / dl	3.6 g / dl	1.7 - 3.2

Source: Military Hospitals, Ministry of Defence, India

N = 14

N= 11

N=06

OBSERVATIONS

To provide a fundamental basis for understanding choice-making and choice confidence, we analysed blood samples concurrently with a choice - testing questionnaire was served to each subject. The sample was of those respondents with standing history of hypertension and was selected based on previous poor blood pressure control. It is detected that almost all the Hematological Monikers in the above table(s) reflect disturbing trends. Based on clinical tests, it is inferred that; Choice making potential is bad when

- Blood sugar fasting readings are detected as ‘abnormal’.
- Blood sugar post – prandial readings are detected as ‘abnormal’.
- Blood sugar random readings are detected as ‘abnormal’.
- Urea readings are detected as ‘abnormal’.
- Creatine readings are detected as ‘abnormal’.
- Sodium readings are detected as ‘abnormal’.
- Potassium readings are detected as ‘abnormal’.
- S bilirubin direct readings are detected as ‘abnormal’.
- S bilirubin indirect readings are detected as ‘abnormal’.
- Aspartate trans amines AST readings are detected as ‘abnormal’.
- Alanine trans amines alt readings are detected as ‘abnormal’.
- Lipid T - cholesterol readings are detected as ‘abnormal’.
- Lipid tri - glyceride readings are detected as ‘abnormal’.
- Low-density lipo protein readings are detected as ‘abnormal’.
- Very low-density lipo protein readings are detected as ‘abnormal’.
- High density lipo protein readings are detected as ‘abnormal’.
- S bilirubin total readings are detected as ‘abnormal’.
- Creatine Phosphate K readings are detected as ‘abnormal’.
- CPK - muscular / mind readings are detected as ‘abnormal’.
- GGT readings are detected as ‘abnormal’.
- T - Protein readings are detected as ‘abnormal’.
- Albumin readings are detected as ‘abnormal’.

- Globulin readings are detected as 'abnormal'.
- A: G ratio readings are detected as 'abnormal'.

EYE MOVEMENTS

When one makes choices, effects sometimes rest not only on self - choices but on choices of others. Entrepreneur often re - examine attributes numerous times during single choice. When entrepreneur make risky choices, they move eyes over attributes of choice in a convoluted design. This paper does not purport to report findings that are universally and eternally applicable, nor grounded firmly in theoretical or empirical research. It submits to a conjectural puzzle (Meta - *explicandum?*). It does not address single, well-defined issue, sharply focused on particular disciplinary topic. Instead, it reports on exploratory inquiries, whose coalescing leitmotif is class of real-world complications. The abstract views are based on gaps or inadequacies in scientific canon that can be formulated as questions to pursue where elucidations may lie (Satpathy, J. et al; 2018).

Eye Tracking Methodologies: Since development of eye tracking methodologies, researchers have been able to get prevue into cerebral processes involved with performing task-making choice). The advantage is that they consent to go beyond studying consequence of task (choice) and monitor progression through which Entrepreneur goes about making a choice. Because where someone is looking and what they are paying Entrepreneurial (attention) are securely joined (there is an eye-mind link), researchers track choice entrepreneur's (attention) throughout a trial. With this evidence, they can examine classification with which choice entrepreneur samples data about choice options and duration of time spent making allowance for them. These methods will be useful in adjudicating between contradictory models with divergent accounts. Eye tracking methods are not a cure-all and restricted in capacity to support inferences about choice-making (Satpathy, J. et al; 2018).

Role of eye movements during entrepreneurial choice construction is not entirely clear. In neural computational simulations of entrepreneurial choice-making, preference in judgment task is epitomised by corresponding protuberance of neural bustle. This activity has two idiosyncratic apparatuses: intensification of action and choice inception for action to overcome in order for choice to be made. A technique to review is to scan orientation of behaviour leading up to choice point. Investigating eye movements is expedient in providing substantiation of choice positioning of entrepreneurial behaviour replicating computational choice. Eye movements reproduce escalatory choice significance, leading to gaze chute in which eye movements dynamically feed value of individual opportunities. Intention of this paper is to shadow preceding suppositions that eye movements have causative stimulus on entrepreneurial choice formation (Satpathy, J. et al; 2018).

Kowler Model: Kowler (Rutgers University, USA) model states that eye movements are integral part of (entrepreneurial) interactions with visual world. Tasks, inspecting contents of visual scene, require that Entrepreneurs bring eye swiftly and precisely to weighty and expedient positions. Eye movements accomplish this with virtually no overt effort or awareness. Model involves (entrepreneurial) eye movements and connections between eye movements, perception and cognition. Model is devoted to understanding how eye movements are planned, how they are carried out, how to maintain percept of clear, stable and coherent world despite continual changes in visual array that eye movements produce. One major effort understands relationship between (entrepreneurial) eye movements and (entrepreneurial) attention, question of how (entrepreneurial) attention is involved in eye movement control and how to attend to visual environment independently of movements of eye. Model emphasises active integration of (entrepreneurial) eye movement planning with ongoing visual and cognitive processes. The model incorporates components of visual Entrepreneurial (attention), eye movements, eye movements and their role in visual and (entrepreneurial) cognitive process, Entrepreneurial (attention) during active visual (entrepreneurial) tasks, oculomotor control, visual memory, and allocation of visual Entrepreneurial (attention), accuracy and precision of visual and cognitive processes in new directions for (entrepreneurial) choice research (Satpathy, J. et al; 2018).

Eye Movement: This refers to voluntary or involuntary movement of eyes, helping in attaining, possessing and tracking optical impetuses. 'Saccade' is quick, concurrent movement of both eyes between two or more phases of fixation in same direction. Cohort of saccade may consider outcome of choice-making process. Functional models are based on accretion of corporeal corroboration in favour of various alternatives in sprint to (entrepreneurial) choice threshold. Outcome is affected by variables such as value of sensory evidence, probability of alternative movements and reward associated with different movements. Salient progress has been made in studies of visual saccadic choice-making, a system that is becoming a model for understanding (entrepreneurial) choice making in general. In this, theoretical models of choice-making are beginning to be

used to describe computations (entrepreneurial) mind must perform when it connects sensation and action (Glimcher; 2003) (Satpathy, J. et al; 2018).

Eye Tracking: Eye tracking is process of measuring either point of gaze (where one is looking) or motion of eye relative to head. In unassuming terms, eye tracking is measurement of eye activity. Where do (entrepreneurs) look? What do (entrepreneurs) ignore? When do (entrepreneurs) blink? How does pupil react to different stimuli? Application of (entrepreneurial) eye movements to user interfaces; both for analysing interfaces, measuring usability and gaining insight into human performance and as actual (entrepreneurial) control medium within human (entrepreneurial) - mainframe dialogue (Satpathy, J. et al; 2018).

Eye Gazing: (Entrepreneurial) eyes and (entrepreneurial) gaze are significant stimuli for (entrepreneurial) interactions. Gaze means 'to look steadily, intently and with fixed Entrepreneurial (attention). (Entrepreneurial) eye region of represents special area due to extensive amount of (entrepreneurial) data that can be extracted. Eye region carries data necessary for emotion recognition. Cognitive and (entrepreneurial) Behavioural Neuro - choice science has recently witnessed explosion of scholarship investigating processing of (entrepreneurial) eye region and gaze direction in various tasks and organisational situations. Due to extensive complexity, underlying neural systems subtending these (entrepreneurial) processes are far from being agreed (Satpathy, J. et al; 2018).

CONCLUSION

The conclusion drawn is that when the blood parameters are abnormal, then the choice making potential is bad. As regards advocacy for eye research in choice-making is concerned, what are the mechanisms that keep gaze stable with either stationary or moving targets? How does motion of (entrepreneurial) cognitive image on retina affect vision? Where do (entrepreneurs) look - and why - when performing complex (entrepreneurial) task? How can the world appear clear and stable despite continual movements of (entrepreneurial) eyes? (Entrepreneurial) Cognitive processes driving eye movements during (entrepreneurial) choice-making are not in any consequential way different from those in similar tasks. (Entrepreneurial) Eye movements in (entrepreneurial) choice-making are partially driven by (entrepreneurial) task demands. Eye movements in (entrepreneurial) choice-making are partially driven by stimulus properties that bias (entrepreneurial) data uptake in favour of visually salient stimuli. Eye movements do not have causal effect on (entrepreneurial) preference formation. However, through properties inherent to visual system, such as stimulus-driven attention, (entrepreneurial) eye movements do lead to down-stream effects on (entrepreneurial) choice-making. Choice entrepreneurs optimise eye movements to reduce demand on (entrepreneurial) memory and reduce number of fixations and length of saccades needed to complete (entrepreneurial) choice task. Drivers of eye movements in (entrepreneurial) choice-making change dynamically within tasks (Orquin and Loose; 2013). Attention should be paid for performing experimental procedures in order to evaluate usability, accuracy and reliability of eye tracking systems. Any (entrepreneurial choice) model that aims to describe (entrepreneurial) choice-making must reflect that visual data play central role in entrepreneurial choice dynamics (Satpathy, J. et al; 2018).

This is an informative paper. Major portions of this paper are mined from various sources published by the author(s)

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**STUDENTS' PRECEDENCE OF ATTRIBUTES RELATED ONLINE MANAGEMENT
EDUCATION– A RIDIT APPROACH**

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ABSTRACT

This paper sheds light in understanding the effectiveness of online management education by ranking the priority, perception and preference shown by students while they are considering online management education. The students' precedence of attributes which are in favor and also against the online management education was considered. The ranking of student's preference and priority of attributes related to online management education was measured and analyzed by RIDIT approach and was inferred that major advantages of online management education includes convenience in performing group assignments, assessments and group projects. Respondents also felt that the quality of courses and pedagogy in online management courses is superior and the Collaborative and interactive learning and teaching were also considered a benefit of performing online management education. However the major limitations related to online management education were found to be No proper accreditation and certification, No recognition by university or education board and also the credibility of exams, assessments and evaluation system was also skeptical. This paper helps in understanding the areas in which the online management education can enhance its favorable features and thereby overcoming its restrictions and increasing the quality of course delivery by using an innovative digital platform.

Keywords: Accreditation, Certification, Collaborative learning, Digital platform, Group Assignments, Online Management education, Pedagogy, RIDIT Analysis.

INTRODUCTION

This study is primarily aimed at understanding the effectiveness of online management education by ranking the priority, perception and preference shown by students while they are considering online management education. It can be noted that online management education is growing rapidly. A recent report of "Online education in India: 2021" a study by KPMG in India and Google, indicates that online education will be a \$2 Billion industry in India by 2021. The report by Global Online Education Market - Forecasts from 2018 to 2023 states that global online education market by attributes of technology, vendor, type and user type to accomplish \$286.62 Billion, growing by 10.26% compound annual growth rate – it can be understood that there is a greater importance in understanding the potential and existing student's perception regarding the usage of online management education. With growth in technology, there is a growth in usage of online management education for both corporate and academic purpose. With the advancement of technology like e learning through smart phones, LMS (learning management System), Podcasting, Digital and virtual class rooms and by use of MOOCS (Massive Open Online Courses) which are powered by advancement in Information and communication technology, the usage of online management education plays an important role.

This study explores the priority and perception of potential and existing students regarding various aspects of online management education, which were not much studied earlier like opinion regarding quality of pedagogy of online management education, faculty profile, collaboration and interactive learning like group assignments, case studies, and simulations etc and it also highlights the limitations of online management education like credibility of faculty, examinations, certification and accreditation, coordination of learning activities, control and discipline etc.

To understand the precedence, perception and opinion of potential and existing students of online management education, an online survey was done with a sample size of 185 respondents. By using RIDIT (relative to an identified distribution) Analysis scoring method, ranking of importance and preferences regarding advantages and also limitations of online management education was done in order to understand which attributes of online management education are important and also tries to fix the problems related to online management education.

RIDIT" elaborated as "Relative to an Identified Distribution", was first proposed by I. Bross in the year of 1958. RIDIT analysis is a "distribution free" in the sense that it makes no assumption about the distribution of the population under study. It is a mathematical analysis for items related ratings on a three or more point scale.

LITERATURE REVIEW

(Shanan G. Gibson, 2008) have studied the degree to which technology acceptance model was able to sufficiently articulate the faculty acceptance of online education. (Cohen and Lippert, 1999) argued that online

based learning may be essential for skill based learning but may not be suitable for creativity based concepts or general management education.

The learning experience is directly related contentment (Churchill & Surprenant, 1982; Oliver & DeSarbo, 1988; Tse & Wilton, 1988). The study to understand students' perception and satisfaction is to study students' evaluation of the programs and their opinion towards the programs (Ellram & Easton, 1999).

Expediency and flexibility often are much-admired as the unique and most priceless feature of web based courses and programs (Arbaugh & Duray, 2001; Hiltz & Wellman, 1997; Hislop, 1999; Shapley, 2000; Sullivan, 2001). Interactivity in distance education is superior than, the traditional classroom, and current research suggests that it is a highly remarkable forecaster of online course outcomes (Arbaugh, in press; Swan, 2003; Wagner, 1997).

Learner-content communication refers to pedagogical gear and assignments, including presentations, streaming audio and video presentations, group assignments, individual projects, and web links in Web courses. These tools and activities represent pedagogies from a social constructivist view that scholars themselves are creators of knowledge with others (Benbunan-Fich, 2002; Jonassen et al., 1995).

Involvement in students interactions in session conversation has been displayed to be greater (Arbaugh, 2000b; Arbaugh & Rau, 2002; Benbunan-Fich, Hiltz, & Turoff, 2001), more consistently spread (Card, 2000; Strauss, 1996), a basis of powerful bonding (Whipp & Schweizer, 2000), and more beneficial (Wolfe, 2000) in Web-based course activities than in traditional classrooms. However, this interaction can be appreciably more tricky to carry out (Arbaugh, 2000b; Hightower & Sayeed, 1996; Yoo, Kanawattanachai, & Citurs, 2002) and less pleasing (Ocker & Yaverbaum, 1999; Piccoli, Ahmad, & Ives, 2001; Warkentin et al., 1997).

(Mason 1991) studied interactivity in a distance education class at the Open University in Great Britain and establish that instructors played a key role in directing the online discussions. Instructors influenced the discussion process by buoyant innovative matters, sharing contemporary material, and redirecting the discussion models.

(Ronald, Stanley, 2005) states that there are three critical interactions which needs to be considered while understanding online education; they are Instructor- Student, Student- Student and Student- Content. (Judy, Jessica, Anne, 2010) have considered two essential uniqueness of student's approval regarding online learning; they are having a favorable perception of usage of technology leading to ease of access and usage of online flexible learning materials and also self controlled innovative learning modules.

COLLECTION OF DATA AND SAMPLE SIZE

An online survey was conducted by using a questionnaire, the sample size is 185 respondents of diverse education and work experience backgrounds, the survey targeted undergraduate students who are having no prior work experience, students of online management program, traditional MBA program students, Alumni of MBA colleges who are presently working in various organizations.

62% of the respondents are of the age group 18 to 24 years, only 0.5 % of the respondents were less than 18 years, 23% of the respondents were 25 to 35 Years and the rest of them were above 36 years. 60% of the respondents are males and rest females. Nearly 76% of the respondents were management students and the rest belong to Arts, Engineering Commerce and science streams.

37.5% of the respondents are having less than 1 year or no work experience, 15% of the respondents are having at least 1 to 3 years of work experience and 9% of the respondents have 3 to 5 years of experience as an employee, the rest have more than 5 years of work experience.

45% of the respondents were students (with or without work experience) 55% of the respondents were working professionals (currently not pursuing any education but were students of professional educational programs). 49% of the respondent showed interested in pursuing online management education, 51% had expressed negative opinion regarding it.

79% of the respondents believe that online Management education program/course is better than Distance MBA program offered by traditional universities.

RESEARCH METHODOLOGY AND ANALYSIS

RIDIT analysis is used to understand the students' precedence, perception and opinion regarding online management education. The ranking of priorities of opinions regarding the benefits of online management education and also the limitations of it are done by using the RIDIT (Relative to an identified distribution) Analysis scoring method.

For ranking purpose the five point likert scale for used, to measure the following parameters which were in favor as well as limitations of online management education:

Table-1: Parameters which were in favor as well as limitations of online management education

Sno	In favor of Online Management education	Limitations of Management education
1	Quality of Course and Pedagogy	Lack of seriousness of students
2	Quality of faculty	Lack of discipline and control
3	Collaborations with various foreign universities	Lack of personal attention and feedback
4	Group Assignments	Lack of coordination of group activities
5	Collaborative and interactive learning and teaching	Computer and internet is mandatory
6	Flexibility, ease of study and convenience	No proper accreditation and certification
7	Contemporary and innovative method of learning and teaching	No recognition by university or education board
8	self reflective assignments	Credibility of exams, assessments and evaluation system
9	Cheaper than regular MBA	No Internship, industry interface and corporate exposure
10	Certification and Accreditation	No Job placement assistance

Table-2.a: RIDIT ANALYSIS: Advantages of Online Management Education

Sno	Parameters	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Sum of rows
1	Quality of Course and Pedagogy	5	18	49	78	35	185
2	Quality of faculty	7	23	38	66	51	185
3	Collaborations with various foreign universities	6	10	40	91	38	185
4	Group Assignments	7	32	61	64	21	185
5	Collaborative and interactive learning and teaching	9	23	28	87	38	185
6	Flexibility, ease of study and convenience	5	6	24	75	75	185
7	Contemporary and innovative method of learning and teaching	4	16	21	81	63	185
8	self reflective assignments	5	17	40	82	41	185
9	Cheaper than regular MBA	10	13	37	74	51	185
10	Certification and Accreditation	9	14	41	79	42	185
	Fj	67	172	379	777	455	1850
	Fj/2	33.5	86	189.5	388.5	227.5	
	FJ	33.5	153	428.5	1006.5	1622.5	
	RJ	0.018108108	0.0827027	0.231621622	0.54405405	0.877027027	

Table-2.b: Ranking of favorable parameters by using RIDIT Analysis

					Row Sum	Rank
0.000489408	0.0080467	0.06134843	0.22938495	0.165924032	0.465193572	2
0.000685172	0.010282	0.047576333	0.19409496	0.241775018	0.49441344	6
0.00058729	0.0044704	0.050080351	0.26761578	0.180146092	0.502899927	7
0.000685172	0.0143053	0.076372535	0.18821329	0.099554419	0.379130752	1
0.000880935	0.010282	0.035056245	0.25585245	0.180146092	0.482217677	3
0.000489408	0.0026822	0.03004821	0.22056245	0.355551497	0.60933382	10
0.000391527	0.0071527	0.026292184	0.23820745	0.298663258	0.570707085	9
0.000489408	0.0075997	0.050080351	0.24114828	0.194368152	0.493685902	5
0.000978817	0.0058115	0.046324324	0.21762162	0.241775018	0.512511322	8
0.000880935	0.0062586	0.051332359	0.23232579	0.199108839	0.489906501	4

Table-2.c: Ranking of advantages of online Management Education

Advantages of Online Management Education	
Rank	Parameters
1	Group Assignments
2	Quality of Course and Pedagogy
3	Collaborative and interactive learning and teaching
4	Certification and Accreditation
5	self reflective assignments
6	Quality of faculty
7	Collaborations with various foreign universities
8	Cheaper than regular MBA
9	Contemporary and innovative method of learning and teaching
10	Flexibility, ease of study and convenience

Table-3.a: RIDIT ANALYSIS: Limitations of online Management Education

Sno	Parameters	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Sum of rows
1	Lack of seriousness of students	4	15	37	93	36	185
2	Lack of discipline and control	10	19	36	84	36	185
3	Lack of personal attention and feedback	6	21	42	82	34	185
4	Lack of coordination of group activities	3	21	46	83	32	185
5	Computer and internet is mandatory	5	15	41	55	69	185
6	No proper accreditation and certification	13	29	51	61	31	185
7	No recognition by university or education board	12	24	45	65	39	185
8	Credibility of exams, assessments and evaluation system	6	18	51	81	29	185
9	No Internship, industry interface and corporate exposure	4	19	38	70	54	185
10	No Job placement assistance	7	10	36	70	62	185
	Fj	70	191	423	744	422	1850
	Fj/2	35	95.5	211.5	372	211	
	FJ	35	165.5	472.5	1056	1639	
	RJ	0.018918919	0.089459	0.25541	0.571	0.885945946	

Table-3.b: Ranking of unfavorable parameters by using RIDIT Analysis

					Row Sum	Rank
0.000409058	0.007253	0.05108	0.287	0.172400292	0.518092038	7
0.001022644	0.009188	0.0497	0.259	0.172400292	0.491490139	6
0.000613587	0.010155	0.05798	0.253	0.162822498	0.484582907	5
0.000306793	0.010155	0.06351	0.256	0.153244704	0.483306063	4
0.000511322	0.007253	0.0566	0.17	0.330433893	0.564502557	9
0.001329438	0.014023	0.07041	0.188	0.148455807	0.422430972	1
0.001227173	0.011606	0.06213	0.201	0.186766983	0.462280497	2
0.000613587	0.008704	0.07041	0.25	0.138878013	0.468527392	3
0.000409058	0.009188	0.05246	0.216	0.258600438	0.536641344	8
0.000715851	0.004836	0.0497	0.216	0.296911614	0.568146092	10

Table-3.c: Limitations of Online Management Education

Rank	Limitations of Online Management Education
	Parameters
1	No proper accreditation and certification
2	No recognition by university or education board
3	Credibility of exams, assessments and evaluation system
4	Lack of coordination of group activities
5	Lack of personal attention and feedback
6	Lack of discipline and control
7	Lack of seriousness of students
8	No Internship, industry interface and corporate exposure
9	Computer and internet is mandatory
10	No Job placement assistance

IMPLICATION AND DISCUSSION

By computing the f_j , $f_j/2$ and FJ , RJ values of Tables 2.a and 3.b and by ranking of both favorable and unfavorable parameters as shown in Table 2.c and Table 3.c by applying the RIDIT Analysis, it can be inferred that the three most important advantages in online management education in terms of precedence are Group Assignments, Quality of Course and Pedagogy, Collaborative and interactive learning and teaching. Whereas the three crucial limitations of online management education are No proper accreditation and certification, No recognition by university or education board, Credibility of exams, assessments and evaluation system.

(Harasim 2000) clearly articulates the fact that there is a paradigm shift in learning due to advent of online learning platforms and it can be noted that (Harasim 2000) points out that group assignments, projects and group activities are becoming easier to perform in online learning due to advancement of communication and information technology.

With usage of new Apps like Padlet, Prezi, Black Board, Coursite etc on Smart phones, facilitated by social media like Whatsapp, IMO, Google chat, facebook, linkedin etc, and coordination of group activities over online courses have become easier, convenient and faster. It can be observed that online learning platforms like Coursera, Edx etc.; are increasingly using these Apps for coordinating student activities. Due to increasing quality of course and pedagogy by introducing unique amalgamation of subjects and contemporary courses, online management education is growing rapidly in both corporate and academic arenas.

However, there are certain limitations of online management education which needs to be urgently addressed like authenticity of the course, lack of proper accreditation and certification, no recognition by any professional body or university, the credibility of exams, assessments, and the evaluation system is also needs to be more systematic, and transparent as it is also an important parameter of limitation and concern.

Finally, there is a further scope to study the areas such as the methods to address the problems associated with online management education and also methods which can be adopted to enhance the quality of Management education in an online learning platform.

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DEVELOPING LEADERS IN VUCA : A CASE STUDY

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ABSTRACT

VUCA as Volatility, Uncertainty, Complexity and Ambiguity. It was introduced by the US Army War College to describe volatile, uncertain, complex and ambiguous, multilateral world which resulted from end of Cold War. It is often discussed topic for today's adaptive leaders during annual strategy meets. VUCA was subsequently adopted by strategic business leaders to describe the chaotic, turbulent and rapidly changing business environment. Rapid changes marched forward as technological developments like social media exploded, the worlds population continue to simultaneously grow and age and global disasters disrupted lives, economies and businesses. Leaders who may find their skills growing obsolete as quickly as their organizations change in this volatile, unpredictable landscape. Leaders require agility and adaptability skills to succeed in this VUCA world. Leaders must make continuous shifts in people, process, technology and structure. The current paper explores how VUCA aims in leadership development.

Keywords: Volatility, Uncertainty, Complexity, Ambiguity, Leaders

INTRODUCTION

VUCA was introduced by the U.S. Army War College to describe uncertain, complex and ambiguous, multilateral world which resulted from the end of the Cold War. We are moving from a world if problems, which demands speed, analysis and uncertainty to solve in a world of dilemmas, which demands patience, sense making and an engagement with uncertainty. 'VUCA' is Volatile, Uncertain, complex and Ambiguous are the characteristics of modern strategic dilemmas which requires a different orientation and a set of skills.

Leaders who may find their skills growing obsolete as quickly as their organizations change in this volatile, unpredictable landscape. Leadership agility and adaptability are now required skills for organizations to succeed in this VUCA world. Leaders must make continuous shifts in people, process, technology and structure. This requires flexibility and quickness in decision making. (Horney, Pasmore, O'Shea, 2010).

A recent BCG (Boston Consulting Group) study concluded that organizations today must shift their business models and their leadership skills to become adaptive firms.

REVIEW OF LITERATURE

Anita Sarkar (2015) views that rapid changes are taking place in political, economic, social and technological fronts are making the organizational world increasing in VUCA. The term VUCA is volatility, uncertainty, complexity, ambiguity which has become a common phrase today.

Betof, Lisa M.D. Owens Sue Todd (2014) observes that the once identifiable boundaries of our marketplaces and industries have become permeable. Now they shift continuously, sometimes slowly, sometimes quickly, but always feeling slightly beyond our grasp. In this environment, leaders realize that a sustainable future is only possible if organizations can sense, adapt and respond to change if they can help their organizations evolve with an evolving world.

Harish Manwani (2013) observes that we are living in a world where volatility and uncertainty have become the New Normal. Companies that were synonymous with their product categories just few years ago are now no longer in existence. We live in a VUCA world surrounded by black swans. This is the New Normal. But even with this unpredictably changing world, there are a few important underlying mega trends that will shape our future.

A report by the Center for Creative leadership (Petrie, 2011) notes that today's VUCA business environment requires leaders to possess more complex and adaptive thinking abilities. It also notes that methods used to develop new skills requirements have not changed much and as a result leaders are not developing fast. HR and talent management professionals must position their organizations to succeed in today's business environment by developing agile leaders.

CASE STUDY ON UNILEVER

Unilever one of the world's largest consumer goods companies, pledged to double the size of their business in the next 10 years while reducing its environmental footprint and increasing its social impact. Sustainability

became a central component of their new business model, one based on VUCA principles. When asked by Forbes contributor Avi Dan why they changed their business model, Keith Weed, chief marketing and communication officer for Unilever, responded.

“We look at the world through a lens, which we call VUCA, which stands for ‘Volatile, Unstable, Complex and Ambiguous.’ So you can say, Its a very tough world, or you can say It is a world that is changing fast and we can help consumers navigate through it. Two and half billion and more people will be added to the planet between now and 2050 of which 2 billion will be added in developing countries. The digital revolution, the shift in consumer spending all this suggests that companies have to reinvent the way they do business.”(Dan, 2012.)

To meet that VUCA challenge, Unilever has also changed its leadership development model.

VUCA PRIME

The VUCA prime was developed by Bob Joohansen, distinguished fellow at the Institute for the future and the author of leaders make the future. He proposed that the best VUCA leaders are characterized by vision, understanding, clarity and agility. The VUCA prime can be seen as the continuum of skills leaders can develop to help make sense of leading in VUCA world. Leaders with a clear vision of where they want their organizations to be in three to five years can better weather volatile environmental changes such as economic downturns or new competitions in their markets.

Volatility: The nature, speed, volume, magnitude, dynamics of change. This situation is unstable and may be of an unpredictable duration. It is not a anticipated situation as knowledge about a similar challenge.

Uncertainty: It can be countered with the understanding the ability of a leader to stop, look and listen. To be effective in VUCA environment leaders must learn to look and listen beyond their functional areas of expertise to make sense of the volatility and to lead with vision. This requires leaders to communicate with all levels of employees in their organization, and to develop and demonstrate teamwork and collaboration skills.

Complexity: It can be countered with clarity, the deliberative process to make sense of the chaos. In a VUCA world chaos comes swift and hard. Leaders who can quickly and clearly tune into all of the minutiae associated with chaos which can make better and more informed business decisions.

Ambiguity: It can be countered with agility, the ability to communicate across the organization and to move quickly to apply solutions. Vision, Understanding, Clarity and Agility are not mutually exclusive in the VUCA prime rather they help managers become stronger VUCA leaders.

VUCA leaders must see where they are going and also remain flexible about how they get there (Apollo Research Institute Staff, 2012). They must be self aware about their strength and weaknesses as leaders are adaptable, open to change. They must work collaboratively and be excellent communicator to thrive in a complex VUCA environment (Kail, 2010).

CONCLUSION

Today in this VUCA world is not going to disappear. As technology is developing faster the world is becoming more and more global market place. So the terms Volatility, Uncertainty, Complexity and Ambiguity is profoundly changing not only how organizations do business but how business leaders lead. The skills and abilities leaders once needed is to help their organizations thrive are no longer sufficient. The role of leadership is increasingly becoming one of the creating moments of clarity and focus and at the same time keeping an eye on what is shifting and reacting to it. Leaders need to walk a fine line between this positions in order to be flexible and sufficiently focusing to keep people motivated. VUCA is complex and challenging that can allow true leadership talents to emerge at all levels of the organization.

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INTELLECTUAL CAPITAL: COMPARATIVE STUDY OF MEASUREMENTS

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ABSTRACT

The organization plays a vital role in satisfying the needs of human beings by providing the goods and services which satisfy their wants. But to achieve this goal association requires the resources which can be in the form of land, labour, capital etc. this all resources are to be utilized to its optimum to achieve the goal of maximum profit. The role of the management is to utilize all this resources to its optimum. Hence they plays an important role in satisfying needs of human being and also the stakeholders whose aim is to earn more return.

But the return generated by this managing personnel is needed to be recorded in the books of account as it proves as very important information from the investor's point of view. So it is needed to measure the value of the knowledgeable human beings which are being considered as hidden capital in the balance sheet. This intellectual capital is required to be measured and different approaches of measurement are already being existed. From various procedures two methods of measurement are considered for study and the only goal behind considering this two methods is to compare the two methods and analyse it critically. For the study purpose five it companies are being selected and past five years data regarding the two methods are collected. This data's will be compared and analysed critically. Lastly suggestions will be provided.

INTRODUCTION

The business plays a very vital role in satisfying the needs of living being. This needs can be satisfied by generating the commodities according to their requirements and also by generating the satisfied return on the investments they have done in the organizations. Shareholders who plays a major role in investing their money are expecting the higher return than the return generated by the other alternatives so the management role is to increase their return by increasing the worth of the firm. When we talk about the price of the firm then management plays a very vital role as they are the persons who are working for the betterment of the organizations and always tries to improve the value of the firm in the market. By generating return of the assets invested as they ultimately satisfy the stakeholders. Now when we talk about the shareholders that include the current shareholders and the potential shareholders who can prefer to be future shareholders in the organization. This current shareholder and potential investors will take this decision based on the information published in the annual reports. Now the annual reports shows only the information of how the company is performing in terms of profit and financial position. But the information relating to the influence of the management in generating return is not been shown in the books of accounts as it is considered as an intangible aspects of the organization. But as we known that they are the major role players in manipulating the value of the organization there is a need to find out the return generated by this management source.

This intangible assets is termed as an Intellectual capital and there is a need arise to calculate the return generated by this intellectual capital in the quantitative terms. Many approaches are been proposed for measuring intellectual capital but from that some are been used because of its quantitative aspects and among that also one method called as Value Added Intellectual Coefficient is a very commonly adopted method. Hence this paper will try to analyses this method by considering the companies dealing in intellects i.e software companies will be selected for study purpose.

INTELLECTUAL CAPITAL

The amount invested in the board members is as good as we can say that they are our assets for the organizations. But as this assets don't have any quantitative aspects for presentation they are been considered as an intangible resources of the organization. This intangible resources comprises goodwill, patent, trademarks, etc. which are been shown in the books of accounts but it also includes the knowledge of the management, the skills, the practice, the relationships developed etc which are not been measured in monetary terms and hence it cannot be recorded in books of accounts. This unrecorded items of management plays a very important role in generating the return for the stakeholders and hence it is required to be measured in a proper way and should also be disclosed in the annual reports so that stakeholders are also been benefited in taking judgments.

This knowledge, skill, experience, relations, structure of the organization in all is been termed as intellectual capital for the organization. This intellectual capital is defined as "Intangible assets which can be used to create wealth such as intellectual, material, information data, experience are defined as intellectual capital" (AKYUZ, September 2013). In simple words it can be said that Intellectual capital is the total of the knowledge of the

organization which cannot be measured in quantitative terms but which can be transformed in to a value for the organization. So here when we say total of all knowledge then it includes different components of the organization.

SIGNIFICANCE OF INTELLECTUAL CAPITAL

Established on the above modules of Intellectual Capital it can be said that Intellectual capital is the very imperative capital which can influence the value of the firm and also the judgments of the stakeholders. Hence it ought be measured and disclosed in the books of the companies. But the financial statements which are prepared by the organization and which are being said as the language of the firm are based only on the quantitative information which records tangible items and some of the intangible assets like trade mark and patents. They fails to show the information relating to the significant capital of the firm like price of management in the organization, value of the relations created by the organization and the return generated by the management. Hence there is a need to measure the worth of intellectual capital and the return generated by the Intellectual capital.

REVIEW OF RELATED LITERATURE

The Irina Berzkalne (2013) in the paper title “Intellectual Capital and Company value” wants to identity the association between Value of Intellectual capital with Company’s value and also the impact of Intellectual capital on price of the company. For this the they considers two methods of valuation one is Tobin’s Q where Market value is compared with replacement cost and secondly Value Added Intellectual Coefficient VAIC is considered where each element of Intellectual Capital, i.e. Human Capital, Structural Capital and Capital Employed Efficiency is measured to find efficiency of Intellectual capital. The study was based on secondary data and 64 Baltic listed company were selected for the period of seven years (2005-2011). Correlation method was applied to analyses the data. The study concluded that the rise in intellectual capital should upturn the value of the company. And even companies value is positively related with the value of Intellectual capital.

In the study of Grezo, he tries to find out the new ratio of intellectual capital by taking base of one of the famous model VAICTM given by Pulic (2000). So new ratio that is Intellectual Capital Efficiency Ratio (ICER) is developed which will be a reliable measure of Intellectual Capital. The paper also tries to identify the connection of Intellectual Capital Efficiency Ratio with the company’s performance and investor’s value creation. 19 companies of food industry sector listed in the Warsaw Stock Exchange for the year 2011-2014 is being consider. The article starts with VAICTM and its critical examination, presenting new structure of ICER. This new model is being verified by developing four hypothesis and its associations with different measures of company performance was tested like with ROA, ROE and shareholder value creation. The outcome shows that there is a positive association between ICER and its components with ROA and ROE and also with shareholder value.

MEASURING INTELLECTUAL CAPITAL

Several approaches are there to measure the Intellectual capital of the firm which has been developed from 1992. Again in measuring Intellectual Capital there are different aspects of measurement like qualitative aspects and quantitative aspects of measurements.

But according to my views quantitative aspects of measurements are more useful and reliable for measurement, even the information’s are available at an ease and which will not vary from sources to sources. Hence in my study I will focus on the quantitative aspects of Measurement.

- **Calculated Intangible Value:** This method says about the excess earning generated by the organization is due to the hidden assets which are not recorded in the books. Here the difference between the future maintainable profits and expected return on the tangible assets employed are calculated. This concept says if the industry average is less than the company’s average return on assets then this method gives negative return but if it’s more then it says that whatever the excess return company is generating is due to the hidden assets i.e. intellectual capital. As the excess return is considered this method is considered proper because when we say Intellectual capital it is called as hidden capital and this hidden capital can be by the difference between Market value and Book value or the excess of earning over and above the average earnings from tangible assets.
- **Value Added Intellectual Coefficient:** This method says about the return generated by the Intellectual capital which includes efficiency of Human Capital, Structural Capital and Capital employed of the organization. This means this method considers both tangible assets and intangible assets for getting the idea of efficiency of intellectual capital as it assumes that intellectual capital has an impact on both the types of assets tangible and intangible.

RATIONALE OF THE STUDY

From the above study it can be seen that any study is done considering any one data and even in that the very famous method of measurement is Value Added Intellectual capital. Secondly the same method has not been compared with other method of measurement. Hence this study tries to compare two method one which is very famous and second which is in relation to the same concept as VAIC to find out result. Whether it is able to give the information relating to the Intellectual capital value.

OBJECTIVES OF THE STUDY

1. To understand the different methods of measurement of Intellectual capital.
2. To calculate the value of Intellectual Capital.
3. To compare two different methods of measurement.
4. To give suggestions regarding the methods of measurement.

RESEARCH METHODOLOGY

- **Collection of Data:** The present study is purely based on secondary data. To measure the value of Intellectual Capital different data's relating to Value Addition, Total operating profit, Total assets, Employee benefits, and Net worth will be collected from the company's annual report from their websites and even from the websites like moneycontrol.com.
- **Sample:** The present study is limited to the Information Technology industry as it is assumed that Intellectual capital are being more used in such industry. The universe is Information Technology sector while for the study only top 5 companies based on the turnover is being selected which is the purposive sampling. So companies' i.e. Infosys, Wipro, TCS, Tech Mahindra and HCL Technologies are purposively selected for study.
- **Period of Study:** The present study will consider the data of last five reporting period of all the companies. The Reporting period from 2014-2018 will be consider for study.
- **Data Collection:** To measure Value of Intellectual Capital two different methods is being considered.

According to Calculation of Intangible Assets

Firstly data according to Calculation of Intangible Assets method is considered and for that the following table is presented. The calculation of the financial value of Intellectual capital is examined in 7 steps.

The first step is the average of pre-tax profits of enterprises needed to be calculated.

Step 1

(Amount in Crores)

Companies	2018	2017	2016	2015	2014	Total Pretax profit	Average Pretax Profit
Infosys	19,908.00	18,939.00	17,600.00	16,798.00	14,002.00	87,247.00	17,449.40
Wipro	10034.3	10687.1	10594.2	10557	9608.2	51,480.80	10,296.16
TCS	32,017.00	29,866.00	29,232.00	24,549.97	23,544.47	139,209.44	27,841.89
Tech Mahindra	4,919.30	3,878.60	3,923.30	2,930.50	3,464.40	19,116.10	3,823.22
HCL Technologies	9,153.00	8,270.00	5,790.52	7,698.54	7,397.66	38,309.72	7,661.94

In second step, the average values of tangible fixed assets for businesses which are implemented by the study are calculated as follows:

Step 2

(Amount in Crores)

Companies	2018	2017	2016	2015	2014	Total Tangible Assets	Average
Infosys	9,027.00	8,605.00	8,248.00	7,347.00	5,719.00	38,946.00	7,789.20
Wipro	3,802.60	3,755.50	3,641.80	3,570.00	3,621.50	18,391.40	3,678.28
TCS	9,430.00	9,214.00	9,056.00	7,964.88	5,887.09	41,551.97	8,310.39
Tech Mahindra	2,237.90	2,427.60	2,256.90	1,948.50	1,793.90	10,664.80	2,132.96
HCL Technologies	3,293.00	3,126.00	2,762.90	3,024.98	2,404.30	14,611.18	2,922.24

In the Third step, average profitability of ratios for tangible assets is calculated.

Step 3

(Amount in Crores)

Companies	Average Net Income	Average Tangible Assets	Profit on Average Tangible Assets %
Infosys	17,449.40	7,789.20	224.02
Wipro	10,296.16	3,678.28	279.92
TCS	27,841.89	8,310.39	335.02
Tech Mahindra	3,823.22	2,132.96	179.24
HCL Technologies	7,661.94	2,922.24	262.19

In the fourth step, the profitability of the sector average ratio of tangible fixed assets must be calculated.

Step 4

(Amount in Crores)

Companies	Average Net Income	Average Tangible Assets	Profit on Average Tangible Assets %
Infosys	17,449.40	7,789.20	224.02
Wipro	10,296.16	3,678.28	279.92
TCS	27,841.89	8,310.39	335.02
Tech Mahindra	3,823.22	2,132.96	179.24
HCL Technologies	7,661.94	2,922.24	262.19
Total	67073	24833	256.08

In calculating the return on tangible assets, if the profit rate is under the sectorial average, the companies having profit on average tangible assets under sectorial average aren't incorporated in the so-called calculation. According to fourth step; it is seen that Wipro Ltd, TCS Ltd and HCL Technologies having profit on average tangible assets over sectorial average. So the other two companies aren't incorporated into further calculations.

The fifth step, the excess returns of enterprises needed to be calculated. More return the entity's fixed assets amounting to an average rate of return in the sector multiplied by the average of the sum of tangible fixed assets, the entity is calculated by subtracting the average income for the period.

Step 5

(Amount in Crores)

Companies	Average Tangible Assets	Sector Average ROA %	Normal Yield	Average Profit for the period	Yield Surplus
WIPRO	3678.28	256.078	941926.59	10296	931630.59
TCS	8310.39	256.078	2128108.1	27842	2100266
HCL TECHNOLOGIES	2922.24	256.078	748321.38	7661.94	737659.44

In the sixth step, the net excess returns of enterprises need to be calculated first. i.e. yield surplus minus the tax rate applicable in the industry. According to the turnover of the companies it is assumed to be the maximum tax i.e. 30% which is adopted for further calculations. Net yield surplus is calculated by deducting tax from the yield surplus.

Step Six

(Amount in Crores)

Companies	Yield Surplus	Tax on excess return %	Net Yield Surplus
WIPRO	931630.59	30	652141.42
TCS	2100266	30	1470186.2
HCL TECHNOLOGIES	737659.44	30	516361.6

In the last step, the ratio of Net Yield Surplus of business to Weighted Average Cost of Capital is calculated and amount of Intellectual Capital is found. The WACC of Capital is being available on the websites of their companies which is considered authentic and due to paucity of time it is not been calculated again. Hence WACC is considered for this three companies and the amount of Intellectual capital is being calculated.

Step Seven

(Amount in Crores)

Companies	Net Yield Surplus	Weighted Average Cost of Capital %	Value of Intellectual Capital
WIPRO	652141.42	6.81%	44410.831
TCS	1470186.2	9.50%	139667.67
HCL TECHNOLOGIES	516361.6	4.57%	23597.725

Data Analyses of Calculated Intangible Assets: from the above calculated statistics it can be seen that out of five IT companies the two companies i.e. Infosys which is considered the topmost company and Tech Mahindra cannot calculate the Value of Intellectual Capital by this method as their Return on tangible assets is less than industry average. Secondly both the companies are utilizing their intellectual capital but then also it's not possible to measure value of intellectual capital and this is the limitation of this method.

Thirdly when we assume industry average it's only the average of the company selected for study. So the finding the average return of industry is also very complicated. So due to these factors this method is less accepted by the values of Intellectual capital.

According to Value Added Intellectual Coefficient (VAIC): This method is developed by Pulic (2000), which monitors and measures the value creation efficiency in the company according to the data published in the books of accounts. The main objective of this model is to measure the extent to which a company produces added value based on intellectual capital efficiency. i.e. the productivity of intellectual resources. This model includes Human Capital Efficiency, Structural Capital Efficiency and Capital Employed Efficiency.

Human Capital Efficiency (HCE): Human Capital Efficiency includes Human Capital which is interpreted as employees' benefits and Total Value Additions of the company is considered.

HCE = Value Additions / Human Capital

Structural Capital Efficiency: Structural capital efficiency includes Structural Capital which is calculated as Value Additions less Employee Benefits and then compared with Total Value Additions.

SCE = Structural Capital / Value Additions

Capital Employed Efficiency: Capital Employed is interpreted as Net worth i.e. Total Assets less Total Liabilities and it is compared with Total Value Additions.

CEE = Value Addition / Capital Employed

Value Added Intellectual Coefficient VAIC is a sum of HCE, SCE and CEE.

Step-1. Collecting the data's for HCE, SCE and CEE

Particulars	Value Additions	Human Capital	Structural Capital	Capital Employed
Infosys				
2018	44,644.00	32,472.00	12,172.00	63,502.00
2017	42,082.00	30,944.00	11,138.00	68,017.00
2016	38,274.00	28,207.00	10,067.00	61,082.00
2015	33,299.00	25,115.00	8,184.00	48,068.00
2014	31,793.00	24,350.00	7,443.00	42,092.00
Wipro				
2018	34,228.90	21,756.20	12,472.70	42262.6
2017	34,140.00	21,854.40	12,285.60	46705.6
2016	32,768.80	21,267.10	11,501.70	41225.7
2015	29,807.80	19,726.30	10,081.50	34621.6
2014	27,099.40	18,337.50	8,761.90	29355.9
TCS				
2018	69,551.00	51,499.00	18,052.00	75,866.00
2017	65,604.00	48,116.00	17,488.00	78,022.00
2016	58,810.00	42,420.00	16,390.00	65,013.00
2015	52,485.03	27,368.32	25,116.71	45,416.44
2014	43,099.49	21,466.56	21,632.93	44,051.88
Tech Mahindra				

2018	19,758.40	8,106.50	11,651.90	19540.38
2017	19,493.60	7,744.40	11,749.20	16890.2
2016	17,556.10	7,410.10	10,146.00	14784
2015	15,936.10	7,201.20	8,734.90	12486.5
2014	12,733.80	6,971.50	5,762.30	9820.2
HCL Technologies				
2018	12,546.00	7,365.00	5,181.00	27563
2017	11,302.00	6,844.00	4,458.00	25973
2016	8,182.93	4,866.92	3,316.01	21496.57
2015	9,996.31	5,924.62	4,071.69	19405.75
2014	8,776.36	5,123.95	3,652.41	15753.26

Step-2: Calculating the Efficiency

Particulars	Human Capital Efficiency	Structural Capital Efficiency	Capital Employed Efficiency	Value Added Intellectual Capital Efficiency
Infosys				
2018	1.374846	0.272646	0.703033	2.350525
2017	1.359941	0.264674	0.618698	2.243313
2016	1.356897	0.263025	0.6266	2.246522
2015	1.325861	0.245773	0.692748	2.264382
2014	1.305667	0.234108	0.755322	2.295097
Wipro				
2018	1.573294	0.364391	0.80991	2.747595
2017	1.562157	0.359859	0.730962	2.652978
2016	1.540821	0.350995	0.794863	2.68668
2015	1.511069	0.338217	0.86096	2.710245
2014	1.477813	0.323325	0.923133	2.724271
TCS				
2018	1.350531	0.259551	0.916761	2.526843
2017	1.363455	0.266569	0.84084	2.470864
2016	1.386374	0.278694	0.904588	2.569657
2015	1.917729	0.47855	1.155639	3.551919
2014	2.00775	0.50193	0.97838	3.488061
Tech Mahindra				
2018	2.437353	0.589719	1.011157	4.038229
2017	2.517122	0.602721	1.154137	4.27398
2016	2.369212	0.577919	1.187507	4.134638
2015	2.212978	0.54812	1.276266	4.037365
2014	1.826551	0.45252	1.296695	3.575766
HCL Technologies				
2018	1.703462	0.41296	0.455175	2.571598
2017	1.651373	0.394443	0.435144	2.480961
2016	1.681336	0.405235	0.380662	2.467234
2015	1.687249	0.407319	0.515121	2.609689
2014	1.712811	0.416165	0.557114	2.68609

DATA ANALYSIS OF VALUE ADDED INTELLECTUAL COEFFICIENT

This method considers all the aspects of balance sheet. It considers the net worth, i.e. shareholders fund and its return, return of human capital and the capitalized value of structural capital. Hence it's the holistic approach of valuing Intellectual capital. For this again last five years data of five IT companies are being calculated and the trend of Intellectual capital coefficient, structural capital efficiency, human capital efficiency and capital employed efficiency.

This trend shows that Out of the five selected companies Tech Mahindra Company is having the maximum efficiency in Human capital, structural capital, Capital employed and Intellectual capital coefficient. While rest of the companies are having the similar efficiency. But if we see the formula of human capital efficiency and

structural capital efficiency that the structural capital is the value addition after human capital so this is simply the inverse of the human capital efficiency. When we combine both it is the total return generated by both and which will be equal to total value added. So when we say about the formula there is a need to revise this formula also.

Secondly if we see the components of Intellectual capital then one of the component i.e. Relational Capital has also being ignored in measurement.

So considering the loop holes there is a need to revise this formula also.

COMPARATIVE ANALYSIS

By comparing both the method it can be said that both the methods are having its own limitations and advantages. If we say about Calculated Intangible Assets the limitations are already been discussed but it's also having the advantages and that advantages are – i. The value of Intellectual capital can be calculated from the data's given in the financial statements hence the data's obtained are reliable, ii. It is calculated based on the excess earning which is again a reliable measure of intellectual capital.

Again the advantages of VAIC are – the data are being easily available and the data's are collected from the annual financial statements which are being audited by the external auditor. So the data's are authentic. Even the calculation is also simple so even a layman can calculate the efficiency of Intellectual capital and even the other capital of the companies.

CONCLUSION

The research cover only 5 companies of Information technology which is using its Intellectual Capital more often and the period of study is from 2014-2018. Value of Intellectual capital and its efficiency has been calculated by both the methods and it is critically analyzed. Based on the above merits and demerits of both the method it can be said that the valuation method for Intellectual Capital should be multidimensional. All the aspects should be considered for measuring Intellectual Capital as it is playing a major role in creating the value for the firm. So it can be said that with Intellectual capital value the efficiency of Intellectual capital should be combined so that it will give clearer picture to the shareholders. It is also been recommended that once the method is approved the same should be included in the disclosure practice also as the disclosure of Intellectual capital will help even the other stakeholders to take vice decisions.

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TREND ANALYSIS OF CREDIT MANAGEMENT: A CASE STUDY ON INFOSYS LIMITED

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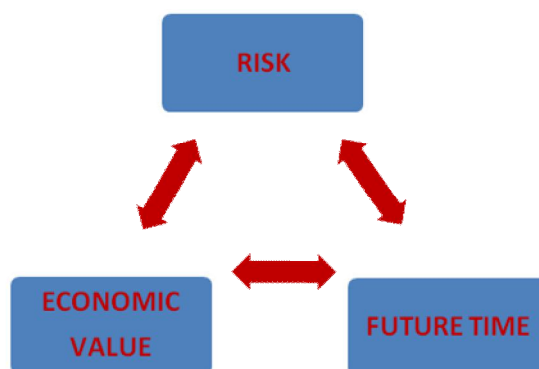
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Receivable becomes major part of current assets of the firms. Current assets are summation of Inventories, Trade receivables and Cash and Cash equivalent. In Indian, most of the transactions occurred on credit terms which converts in receivables and therefore plays pivotal role after inventories in current assets. Normally trade receivables of Indian based companies consist 1/3rd of current assets. As major amounts of all the companies are blocked in receivables, it requires serious attention for effective and efficient management. Here researchers attempt to examine the credit management of Infosys Company.

Keywords: Credit Management, Infosys.

INTRODUCTION

Credit risk of companies refers to the probable loss which is probably occurred due to a borrower's failure to make payments on any type of debt. Receivable management of any company is the practice of mitigating losses by understanding first the loss and then after creating its reserves at any given time. Each and every firm are either selling goods or rendering the services. Some of the sales will be in cash and remaining portion will involve large amount of credit sales. In that situation, customer discount and trade credit works as essential selling tool for the firms to protect their sales against the competitors and to attract the potential and prospective end users. Receivables means



- (i) Involvement of very high risk,
- (ii) Economic value of goods and services which passes to the buyer,
- (iii) Receivable money in future period.

LITERATURE REVIEW

Padachi. K (2006) examined the trends in working capital management and its effect on performance of the firm. The results showed high investment in inventories and receivables reflected the lower profitability. Even he proved that inventory days and cash conversion cycle has positive correlated with profitability. Whereas on the other hand, account receivables days and account payables days correlated negatively with profitability.

Vadakarai (2007) study found that the receivables management variables depend on the investment made in plant & machinery.

S.Durga Rao & P. Janki Ramadu (2007) titled "Receivables Management of the Indian Commercial Vehicles Industry", shows that the industry had managed receivables efficiently whereas a few individual companies had far less satisfactory scores in this respect about the management of receivable.

AN OVERVIEW OF INFOSYS:

Infosys Limited (formerly **Infosys Technologies Limited**) is an Indian multinational corporation which provides consultation and outsourcing services. Its headquarters situated in Bengaluru.

Infosys is the second-largest India based IT company by 2017 on the basis of revenues and 596th largest public company in the world in terms of revenue. On September 28, 2018, its market capitalisation was \$44.32 billion. The credit rating of the Infosys Company is A- (rating by Standard & Poor's).

Infosys was established by seven engineers in Pune, India, with an initial capital of \$250 in 1981. On 2 July 1981, the company was registered as Infosys Consultants Private Limited. In 1983, it relocated its office to Bengaluru, Karnataka, India. The company changed its name to Infosys Technologies Private Limited in April 1992 and to Infosys Technologies Limited when it became a public limited company in June 1992. It was later renamed to Infosys Limited in June 2011.

SAMPLE UNIT

The study concentrates on Infosys, as one the leading IT based company.

RESEARCH PROBLEM

Normally, it is belief that the higher the degree of competition influences more amount credit sales. Thus, the firm's credit policy is one of the factors which need to examine the size of the working capital. Besides this, liquidity position of company has been tied up with different factors like inventory, debtors' and cash. The researcher attempts to analyse the credit / receivables management of Infosys Limited.

OBJECTIVES OF THE STUDY

The main objectives of the study are

1. To study the debtors position in the Infosys Ltd.
2. To analyse the efficiency of credit management in Infosys Ltd.

HYPOTHESES OF THE STUDY

1. Year wise ratio of debtors to sales of Infosys Ltd. differs significantly.
2. Year wise trend analysis of debtors' collection period of Infosys Ltd. differs significantly.
3. Year wise trend analysis of debtor turnover ratio of Infosys Ltd. year wise differs significantly.

PERIOD OF THE STUDY

The period of the study is from 2008-2009 to 2017-2018.

TOOLS & TECHNIQUES

Ratio analysis is one of the effective techniques to evaluate the credit management. And later on Trend Analysis is used to evaluate the data.

DATA COLLECTION AND INTERPRETATION

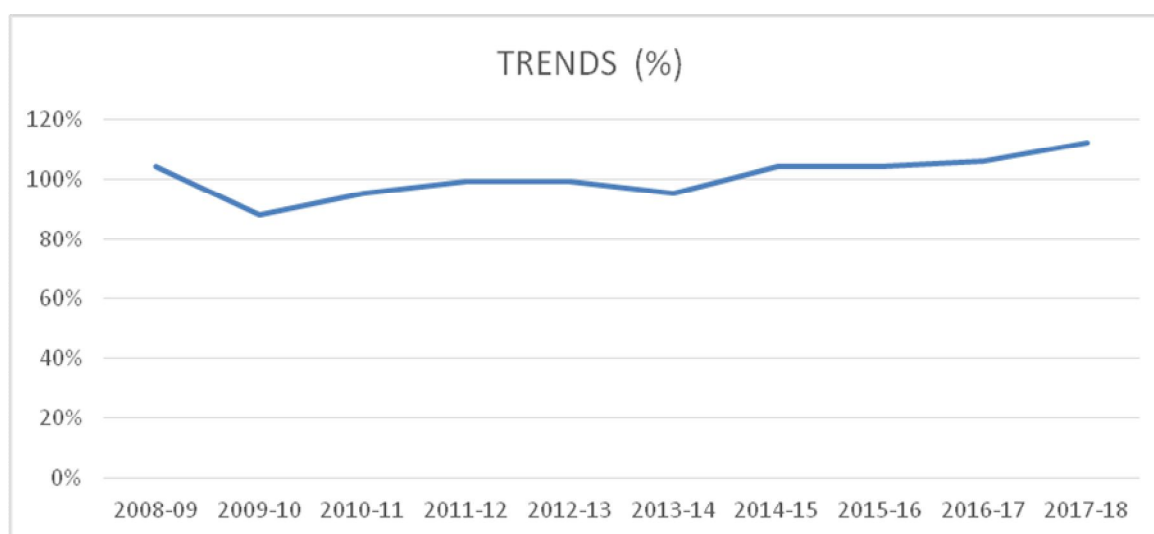
1. DEBTORS' TO SALES (IN %) RATIO

This ratio is computed by

$$= \text{Total Receivable} / \text{Total Sales} * 100$$

The higher the percentage of the ratio shows inefficiency of management. Lower the percentage of the ratio indicates that sound credit management of the company. The ratio of the company shows variation. From 2014-15 onwards it was continuously increasing but looking to the absolute figure researcher cannot conclude so data has been converted into the trend percentage in which average of ratio that is 17.43% considered as 100% and rest of the data has been converted into the percentage. The highest percentage shows in the year 2017-18 which shows company's inefficiency to manage the receivable.

YEAR	RATIO OF DEBTORS' TO SALES (%)	TRENDS (%)
2008-09	16.73%	104%
2009-10	15.34%	88%
2010-11	16.59%	95%
2011-12	17.29%	99%
2012-13	17.31%	99%
2013-14	16.54%	95%
2014-15	18.24%	104%
2015-16	18.15%	104%
2016-17	18.48%	106%
2017-18	19.61%	112%
Average	17.43%	100%



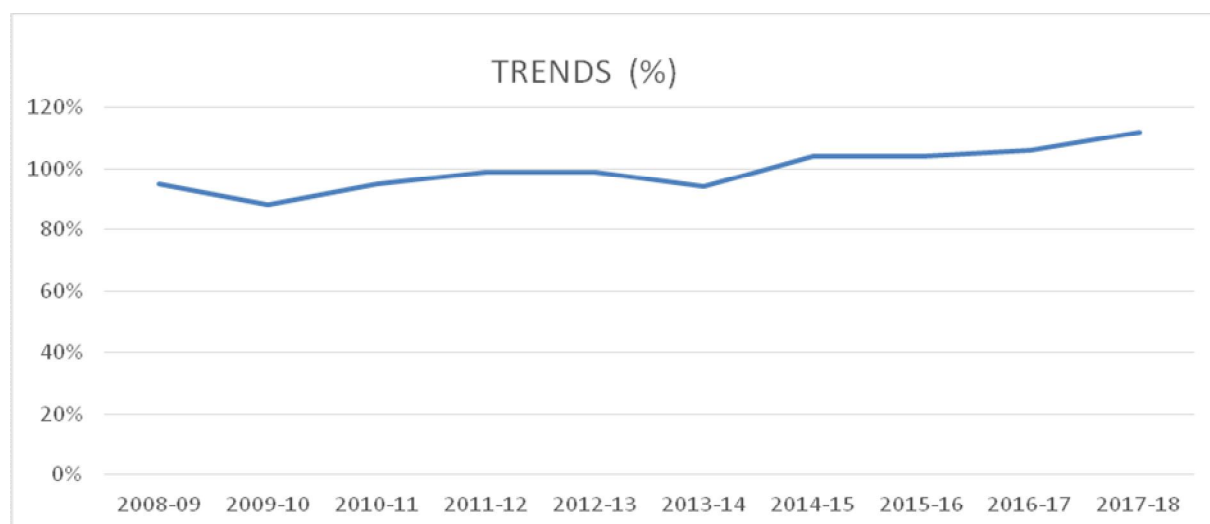
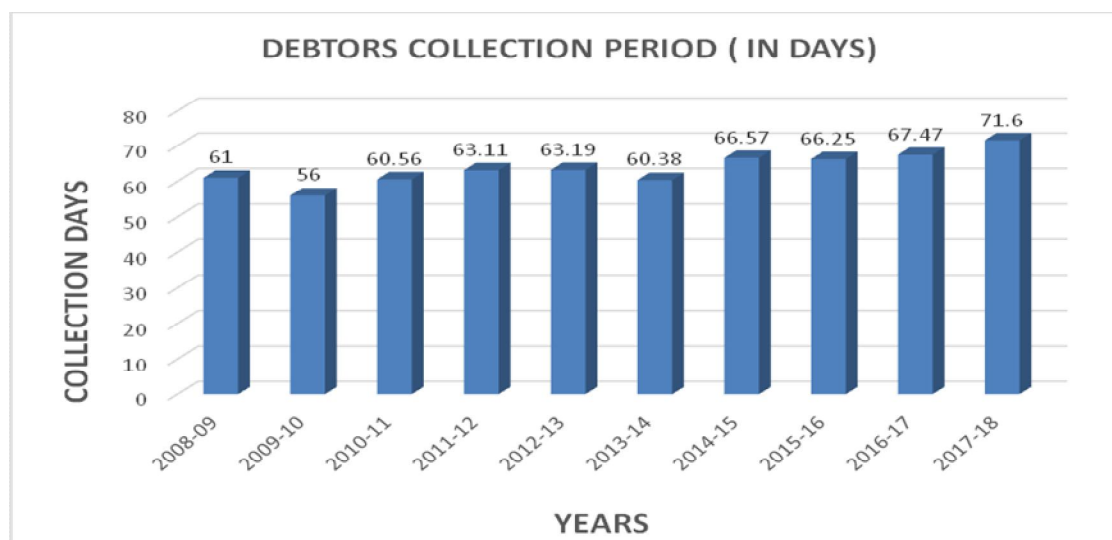
2. DEBTORS COLLECTION PERIOD (IN DAYS)

This ratio indicates the efficiency of the debt collection period and to that extent which the debt have been converted into cash. It is very helpful to the management because it represents the average debt collection period.

$$= \text{Accounts Receivable} / \text{Net credit sales} * 365$$

The ratio of the company shows variation. From 2014-15 onwards it was continuously increasing but looking to the absolute figure researcher cannot take any decision so data has been converted into the trend percentage in which average ratio that is 63.613 considered as 100% and rest of the data has been converted into the percentage. The highest percentage shows in the year 2017-18 which shows company's inefficiency to collect the receivable.

YEAR	RATIO OF DEBTORS COLLECTION PERIOD (IN DAYS)	TRENDS (%)
2008-09	61	95%
2009-10	56	88%
2010-11	60.56	95%
2011-12	63.11	99%
2012-13	63.19	99 %
2013-14	60.38	94%
2014-15	66.57	104%
2015-16	66.25	104%
2016-17	67.47	106%
2017-18	71.60	112%
Average	63.613	100%



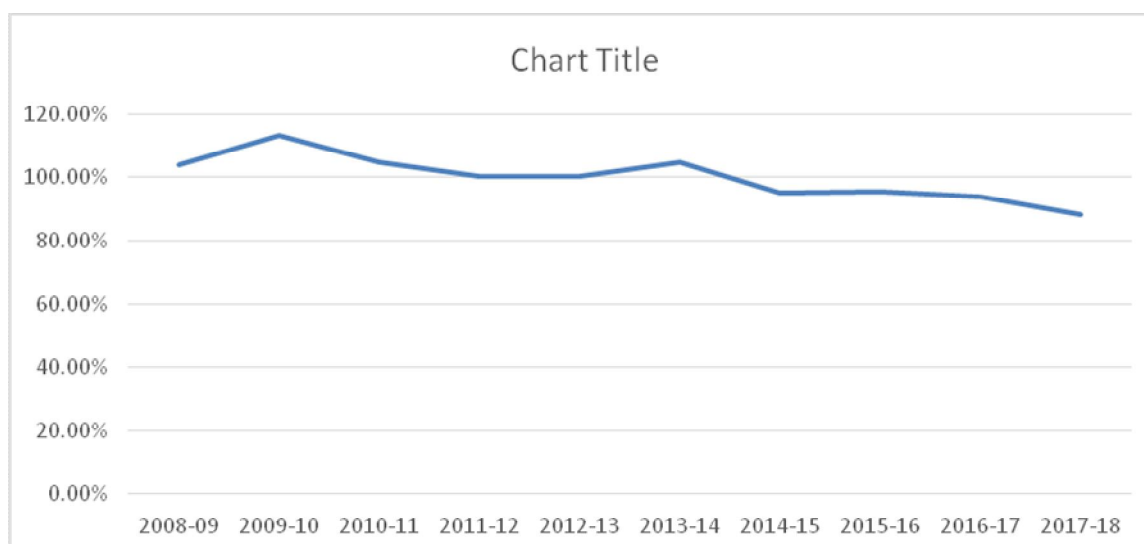
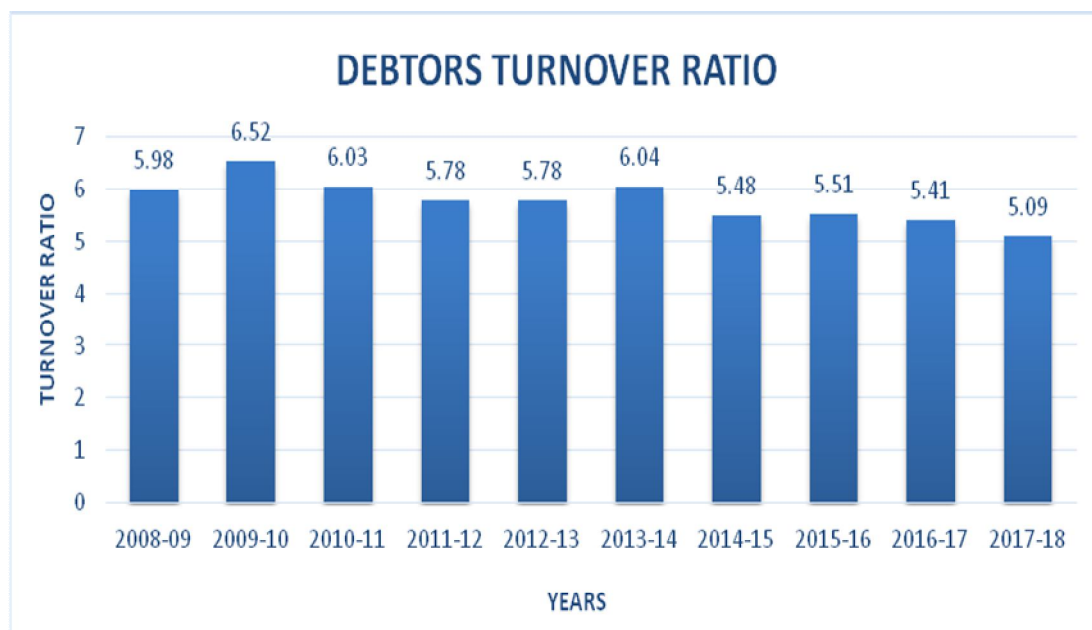
3. DEBTORS TURNOVER RATIO (TIMES)

Debtor's turnover ratio indicates that number of times the receivables are turned over in business during a particular period. Receivables and Debtors represent the uncollected portion of credit sales. It is also termed as Debtors' velocity. It is calculated as

$$= \text{Net Credit Sales} / \text{Average Receivables}$$

The ratio of the company shows variation. From 2014-15 onwards it was continuously decreasing but looking to the absolute figure researcher cannot take any decision so data has been converted into the trend percentage for which average of ratio that is 5.762 considered as 100% and rest of the data has been converted into the percentage. The lowest percentage shows in the year 2017-18 which shows company's inefficiency.

YEAR	DEBTORS TURNOVER RATIO (TIMES)	TRENDS (%)
2008-09	5.98	103.82%
2009-10	6.52	113.09%
2010-11	6.03	104.69%
2011-12	5.78	100.35%
2012-13	5.78	100.35%
2013-14	6.04	104.86%
2014-15	5.48	95.14%
2015-16	5.51	95.66%
2016-17	5.41	93.92%
2017-18	5.09	88.36%
Average	5.762	100%



CONCLUSION

As receivable occupies always dominant position in total current assets and its efficient management will play a pivotal role in any organization. The study reveals that company managing its receivable in an efficient manner but in the last year of the study period reflect company is unable in handling their receivable.

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VUCA – AN ADVENTURE PLAYGROUND FOR BUSINESS

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ABSTRACT

This paper gives a background and also provides an overview of VUCA. The VUCA situation might have offered challenges for businesses, but it can be treated as prospects for practical and transforming companies, who value transparency.

It is clearly seen that no one individual can get much talented by themselves. Hence, it is a perfect timing for organizations to concentrate on evolving its global view to make best use of the VUCA opportunities. Globalization has put substantial force on leadership and business, requiring fast decision making, vital protection of the culture and global view of the organizations.

The role of HR in uncertain times is more essential than ever, the patrons form Management to Clients expect that HR brings stability to ensure charming functioning and create an environment of certainty around.

MEANING AND INTRODUCTION

VUCA is an abbreviation that stands for volatility, uncertainty, complexity and ambiguity, a mixture of features of a difficult conditions and situations.

The common usage of the term VUCA arose in the 1990s and originates from military vocabulary. Subsequently VUCA is used in emerging ideas and strategic leadership in many organisations.

We can say VUCA has become an adventure playground for the business world. Off late the businesses have experienced a never seen earlier kind of volatility, uncertainty, complexity, and ambiguity.

Shocks in business are coming with greater regularity – we don't have time to prepare, and even if we prepare, another thing comes.

In the globalised world, financial, governmental, technological, social and environmental factors have evolved and continue to take unpredictable turns. What need to be done in such an environment – for sure it is strategizing.

THE ROLE OF HR

The role of HR in uncertain times is more crucial than ever, the stakeholders form Management to Clients expect that HR brings in that pause and stability to ensure smooth functioning and create an environment of certainty around. The employees expect to see HR as a true friend and guide in these uncertain times by protecting their rights and guiding the how to maximize their contributions. HR cannot rely on its good old practice, it has to evolve and innovate, invent new frameworks, processes to make a difference. Innovation need not be great new discoveries but simple ideas which are very effective and scalable. HR needs to not only be a good change catalyst but also a patient listener. In uncertain time, listening is the crucial lynchpin between success and failures.

KEEP EMPLOYEES MOTIVATED

Motivating employees in tough times is minimal in cost. Managers should think about key cheerleaders during both good and bad times.

Recognition: While staff hears negative news all around them, a pat on their back is most important than ever.

Empower employees: Encourage employees to be creative by offering ideas on how to make the company successful and improve performance.

Open communication: be honest with employees and let them know where the organisation stands financially during this period because the company and employees need to be aligned.

Clarify expectations: Employees want to know what is expected of them during downturn. Their job role will change especially when company is trying to do more with less.

There is no doubt that it is harder to keep employees focused. There is a threat that competitors may snatch high performers in these uncertain times.

TRANSFORMATION OF HR ROLE

Changes in leadership practice and change in HR practices is must to sustain in the VUCA world. A revolutionary concept of CPOs, HRBPs and HR Shared Services are introduced in the VUCA world. Organisations expected with adopting the variant HR models, right technology, organizational structure and processes. HR alone cannot give a change in business growth. Fundamentally, managements should bridge the gap between HR activities and business outcomes. HR practitioners require “more and more skills”. A mixture of technical skills and personal characteristics is required in VUCA time. The following are a few:

- Accepting emergency business plans
- Learning agility
- Establish a clear business case for actions and initiatives focusing on results
- High emotional intelligence
- Change management skills
- Experience in sustaining human capital
- Mobility – able to grab opportunity
- Impart knowledge with scientific rigour and imbibe value systems. Right values help enduring business value.
- Sense of responsibility obsessed with rights not duties
- HRBPs need to deliver the required strategic insight to the CEOs
- HR Shared Services should eliminate transactions without shifting the burden from HR to Managers
- Identify and prepare internal talent with potential
- To alert employees who have interface with international markets about cultural and social dimensions.
- To build policies that will shape internal capabilities in accordance with the dynamic external environmental needs
- To focus on developing innovation platforms and risk mitigation.

The following transformation in HR concepts are required in complex VUCA conditions:

Regular concept	Transformation in VUCA
Perceived hierarchical control structures	A culture which encourages open and interdisciplinary cooperation, trustful collaboration
Incremental portfolio maintenance and development	Courageous invest in next generation growth opportunities
Perceived silo and process dominated thinking	Entrepreneurial cross functional teams with early and fast proof of concepts in an open failure culture
Focus on resource utilization and perfect planning	Focus on ability to produce results in fast iterations

D&I (DIVERSITY & INCLUSION)

The working world is moving ever faster and becoming more and more complex. It is the people who will or will not cause the change.

What exactly does D&I mean and why are we so committed to it in VUCA world?

“Diversity is the right mix of people in the company, regardless of their age, generation, gender, nationality, culture, profession or other individual differences. Each and every one of us is diverse in their own way; everyone wants to be accepted.

In the VUCA world we seek to produce innovations every day and we always rely on the feedback of our users for improvement. This is not just talk; it is something that need to put into practice.

SUGGESTIONS

VUCA is a very good depiction of current reality. The rate of change is enormous. Dealing with this is not easy for any of us. The following are some suggestions to face VUCA.

- On the people development side HR needs to offer solutions that enable managers and employees to learn to handle these situations as efficiently as possible.
- Even it is local business we have to handle with global network.
- There should be structured, positive and professional marketing programs to enable the organisations to enable them to develop good relationship with business professionals.
- A strong business network will fuel professional growth of the organisations
- Exemplify that by given business to others, you will get business in turn
- Trust in personal and professional skills will help in continuous improvement of business
- Partner with several organisations that share our values.
- Network including like-minded companies focused on developing mutually beneficial relationships that led to more business
- Leadership teams should believe in “givers gain philosophy” which creates an outstanding culture that promotes collaboration and cooperation in other words a new world of opportunities.

CONCLUSION

VUCA is nothing but “changes in the world around us” which is causing changes in the strategy and design of the business. We need real courage to succeed in this VUCA world.

VUCA is really about the rapidity at which people can innovate, create, collaborate and deliver new products / services to the market.

Today’s business leaders need the ability to have a clear vision for their organizations. They must define the direction of their organization: its mission, values, and strategy so that all stakeholders can find the right direction when events pull them off course.

In the VUCA world, Leaders require new ways of thinking (mind set), new ways of doing (skill set), and new ways of winning (approaches / practices). To be successful in VUCA world, entrepreneurs must be driven, optimistic and committed to their business even in downturns.

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**IS MARKET CAPITALIZATION BASED INVESTING A GOOD STRATEGY? - A
MULTIPLE REGRESSION ANALYSIS OF RANDOMLY SELECTED BSE STOCKS**

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ABSTRACT

Investing in stock market is becoming increasingly popular across all countries, including India. Since there exists high disparity between listed firms in terms of key attributes such as book value, sales, profitability, leverage and liquidity - market capitalization has been conventionally used to categorize listed firms into three broad groups – large-cap, mid-cap and small-cap. Investor expectations and investment strategies are conventionally based on market capitalization (InterActive Corp, 2018). However, complexities of modern financial markets demand empirical evidence for such assumptions. The current study assesses the predictive power of stock risk, stock beta, consistency and market cap to predict stock returns of a stratified random sample of BSE stocks. The Multiple OLS Regression model reported an explanatory power of 90.3%. Evaluating the predictive power of the same variables discriminated by market cap, reveals that large-cap stocks show high informational efficiency. The study concludes that though market cap is significantly correlated to stock returns, its predictive capacity is not significant. Hence market cap investing strategy should be used with caution. The study supports this fair warning by highlighting a few outliers forming Case-wise diagnostics. The threat of representativeness bias is another reason to be cautious with market cap assumptions.

INTRODUCTION

India enjoys a market cap to GDP ratio of 88% (Business Standard, 2018) and an integral part of this financialization has been Bombay Stock Exchange (BSE) – the oldest and largest Indian stock market with almost 6000 listed companies. Market capitalization categories are fluid and changing, but these are generally understood as stocks with a market cap of Rs 10,000 crores or more are large cap stocks; stocks with a market cap between Rs 500 crores and Rs. 10,000 crores are mid cap stocks and those with less than Rs 500 crore market cap are small cap stocks. Companies with varying market capitalization are expected to yield varying market returns over different time periods. Market capitalization (basically market price per share multiplied by outstanding no. of company shares) measures the company's worth in the stock market and reflects investors' perceptions of its future growth prospects. Besides spreading their portfolio across asset classes (equity, bonds, money market instruments) investors usually also diversify across securities of differing market capitalization, while attempting to also "time the market". Thus, several factors inform the formation of a portfolio that seeks to maximize returns. In India, a host of macro-economic and regulatory factors have been adversely affecting industrial activity and stock market returns: the lagged effects of Demonetization and GST on small and medium businesses, re-introduction of long-term capital gains tax, reclassification of mutual funds by SEBI and RBI's Prompt Corrective Action norms. According to Livemint, mid-cap and small-cap indices on BSE have had the steepest decline in the last seven years with mid-cap falling about 14% and small-cap tumbling by 24% (HT Media, 2018). This has set a panic in Indian stock markets about investing based on market capitalization.

Investor expectations and investment strategies are conventionally based on market capitalization (InterActive Corp, 2018). Small cap stocks are expected to provide higher returns as these are fast-growing companies with riskier profiles. Large cap stocks on the other hand are associated with mature, low-growth and stable companies that often pay regular dividends. However, modern markets are more complicated and unpredictable, therefore there is a need to question the conventional wisdom associated with market capitalization and risk-return expectations. The need is to create a predictive model of stock market returns. "Beating the market" or "chasing alpha" has become the mantra of stock market investments and academicians spend long hours unravelling the factors that underlie stock market returns. Risk – both systematic (β) and unsystematic risk; market volatility, size or market capitalization, book value to market value, momentum are some of the various factors identified by prior researchers. The set of independent factors is not a globally accepted fixed set – it varies from country to country and time to time.

LITERATURE REVIEW

Pardy (1992) has hailed capital markets as vital links between the supply of capital by domestic sector and the demand for funds by deficit business organizations. Well-organized and well-regulated stock markets can become engines of growth as long as investor expectations are met and businesses have access to capital. There is a need to keep updating knowledge of risk factors existent in a stock market. French et al (1987) found that

the expected market risk premium is positively related to the predicted volatility of stock returns. Tripathy (2011) has investigated market efficiency of BSE between the period Jan 2005 to Feb 2011 and estimated the causal relationship between stock market returns and selected macro-economic factors such as inflation rate, interest rate, exchange rate as well as international stock market movements. Tripathy has concluded that BSE does not qualify for weak form under *Efficient Market Hypothesis* and it is possible to earn abnormal returns applying predictive models to historical stock prices. Contagion is another emerging variable of interest. Sekmen & Hatipoglu (2016) have studied selected emerging markets to understand the impact of Euro zone debt crisis and US subprime crisis on stock market returns and volatility, using daily stock return observations (totaling 2609) from 3rd June 2004 to 3rd June 2014. The study found clear patterns between boom and bust periods, irrespective of cause of the crisis, its economic impact or region of origin. It was found that negative shocks have a greater impact on volatility than positive shocks, thus underlying the impact of downside risk.

Seth & Gupta (2005) have applied a quality control orientation towards volatility on BSE in order to estimate tolerance limits for investors with varying risk appetite. The study also found BSE prices to vary greatly based on incoming economic information and news. A popular theme in finance is modelling stock market returns based on predictors. With greater computing knowledge and machine learning techniques such studies have become more insightful. Chaudhuri et al (2016) have combined econometric tools and machine learning techniques to predict stock market returns. Four performance measures - mean absolute error, mean squared error, Nash-Sutcliffe Efficiency and Index of Agreement were applied to the unsupervised selection feature and evolutionary algorithm. The key insight from the study is that all explanatory variables did not show statistical significance across different market capitalizations and different time periods. Also higher forecasting efficiency was reported for large-cap and mid-cap stocks but not for small-cap. Another note-worthy research on market capitalization and market returns was a comparative study by Raj, P. & Shahani, R. (2016). They compared the risk-adjusted performance of large cap funds and ELSS funds between April 2009 and March 2014, a period marked by some contagion from the US sub-prime crisis. The study concluded that ELSS funds performed better than their large-cap counterparts primarily due to the lock-in three year period due to which the investors stayed vested while large cap funds suffered from cash drag.

Sontakke, K. A. (2016) has pointed out that investors often clamour after large-cap or blue-chip stocks, consequently small cap stocks have exhibited relatively lower volumes of trading on BSE between 2005 to 2015. Yet, the study concluded that small stocks recorded impressive growth in market price and sustained increase in market capitalization – with a few progressing onto mid-cap category. Wang et al (2013) studied twenty-three emerging markets and assessed the financial integration of large-cap and small-cap stocks within the respective stock markets. Applying the conditional International Asset Pricing Model to evaluate the relationship between excess risk and the covariance risk, the authors conclude that large-cap stocks are integrated with global markets and very large-cap stocks have exhibited very low pricing errors. Eun et al (2008) stated that investor can reap additional gain from international diversification if they invest in foreign small-cap stocks. Theodossiou & Lee (1995) attempted to look beyond the US and have studied stock market returns in 10 industrialized countries. The study concluded stock prices in sample markets follow Random Walk and consequently stock market returns cannot be predicted from historical prices. On the other hand, Baranidharan and Vanitha (2016) have studied seven emerging economies, including India, China, Egypt and Indonesia from 1992 to 2013 and concluded that such emerging markets hold promise for higher returns over the long term as these stock markets are growing in their capitalization.

RESEARCH METHODOLOGY

This empirical research paper focuses on stock returns, stock risk, stock beta, consistency in returns and market capitalization, with the first variable assumed to depend on all of the latter. Closing yearly prices for a period of 20 years from 1996 to 2016 were used for a sample of 105 companies listed on BSE. Mean (Stock Return), standard deviation (Stock Risk) and coefficient of variation (Consistency) were calculated based on these closing prices. Stock beta ($\text{COV}_{i,\text{SENSEX}}/\sigma_{\text{SENSEX}}^2$) was calculated using BSE Sensex values. Indian stock markets witnessed a period of very high valuation in mid and small-cap segment in 2017, followed by a steep fall and liquidity problems in 2018. Hence the study covers an observation period of 20 years, ending at 2016 in order to avoid the unusual volatility that may skew study results. A stratified random sampling was used to randomly select 35 companies each from three mutually exclusive and collectively exhaustive strata: set of companies in BSE Large-cap Index, BSE Mid-cap Index and BSE Small-cap Index. Regression Analysis was conducted using IBM-SPSS statistical software to understand the predictive power of various independent variables. The Multiple Regression OLS Model of stock market returns was tested for statistical significance. Scatterplots and regression lines were observed for market-cap subgroups of each dependent-independent pairing. Finally, few

outlier stocks have been highlighted to show how representativeness bias can creep into a market capitalization investment strategy.

HYPOTHESES

H₁ : Stock returns are correlated to market capitalization

H₂: Stock returns are correlated to stock risk

H₃: Stock returns are correlated to consistency

H₄: Stock returns are correlated to stock beta

H₅: Stock risk, stock beta, consistency and market-capitalization are independent of each other

H₆: Market capitalization has strong explanatory power with regards to variation in stock returns

RESULTS AND DISCUSSION

Table-1: SPSS output for Descriptive Statistics

SUMMARY STATISTICS		Stock Return	Stock Risk	Consistency	Stock Beta
N	Valid	105	105	105	105
Mean		28.6691	77.7864	2.9955	1.323
Median		25.22	68.94	2.87	1.24
Mode ^a		4.99	23.88	2.33	0.99
Std. Deviation		16.49221	38.44467	0.99603	0.60749
Skewness		1.426	1.79	1.932	0.45
Std. Error of Skewness		0.236	0.236	0.236	0.236
Kurtosis		3.28	4.371	6.908	0.661
Std. Error of Kurtosis		0.467	0.467	0.467	0.467
Minimum		4.99	23.88	1.4	0.03
Maximum		104.24	229.97	7.9	3.29
a Multiple modes exist. The smallest value is shown for each variable					

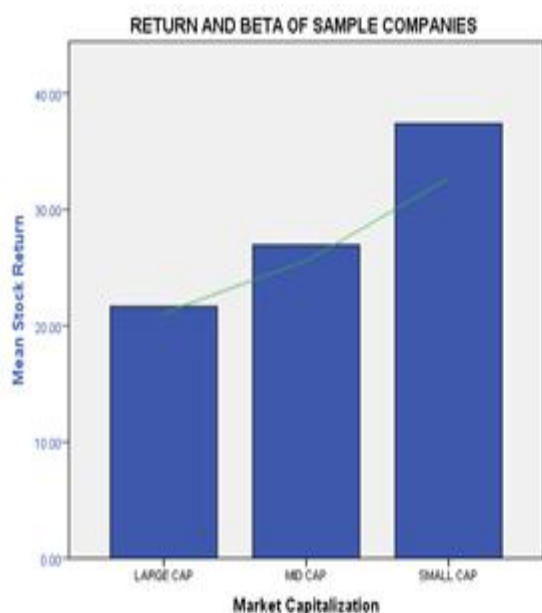


Chart-1: Market Returns and Systematic risk

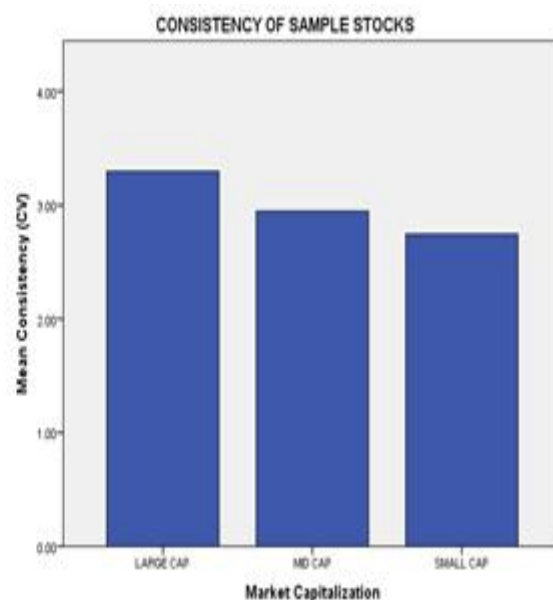


Chart-2: Mean Consistency based on Mkt cap

For the sample 105 companies the lowest return is 4.99% and highest is 104.24% with average being about 28.67%. The average total risk of sample is 77.79%. About 27% stocks are defensive with $\beta < 1$. B values for the sample range from 0.03 to 3.29. Coefficient of variation depicting consistency of stock returns lies between a minimum of 1.4 and a maximum of 7.9. The bar diagrams (Chart 1 and 2) clearly depict that highest stock returns accrue to small-cap stocks but also carry the threat of highest systematic risk. Contrary to popular belief, empirical data shows that large-cap stocks are the least consistent and small cap stocks on BSE are in fact the most consistent category according to 20 years empirical data.

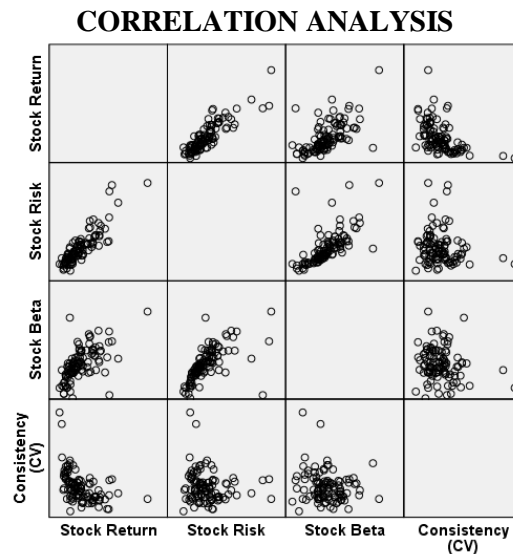


Chart-3: Multiple Bi-variate Scatter Plots of 4 variables.

SPEARMAN'S RHO		Mcap	Stock Return	Stock Risk	CV	Stock Beta
Market Capitalization	Corr. Coeff.	1.000	.452**	.431**	-.234*	.400**
	Sig. (2-tailed)		.000	.000	.016	.000
Stock Return	Corr. Coeff.	.452**	1.000	.870**	-.600**	.689**
	Sig. (2-tailed)	.000		.000	.000	.000
Stock Risk	Corr. Coeff.	.431**	.870**	1.000	-.176	.795**
	Sig. (2-tailed)	.000	.000		.073	.000
Consistency (CV)	Corr. Coeff.	-.234*	-.600**	-.176	1.000	-.170
	Sig. (2-tailed)	.016	.000	.073		.083
Stock Beta	Corr. Coeff.	.400**	.689**	.795**	-.170	1.000
	Sig. (2-tailed)	.000	.000	.000	.083	
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Table-2: Correlation Analysis

Both the bi-variate scatter plot and the Spearman's Rho Analysis (chosen due to the presence of a categorical variable – market capitalization among the other variables) show that there exists significant correlation between return and risk, return and beta, return and consistency as well as return and market cap – hence we can proceed for Regression Analysis.

MULTIPLE REGRESSION OLS MODEL

MULTIPLE REGRESSION OLS MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin - Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.952 _a	.906	.903	5.14419	.906	242.237	4	100	.000	2.193

a. Predictors: (Constant), Stock Beta, Consistency (CV), Market Capitalization, Stock Risk

b. Dependent Variable: Stock Return

Model	Dimension	Eigenvalue	Condition Index
1	1	4.577	1.000
	2	.218	4.583
	3	.109	6.466
	4	.066	8.326
	5	.030	12.346

Model		Unstandardized Coeffs.		Stdzd. Coeffs.	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	19.747	2.437		8.102	.000		
	Market Capitalization	-.337	.690	-.017	-.489	.626	.794	1.259
	Stock Risk	.340	.017	.793	19.596	.000	.571	1.751
	Consistency (CV)	-6.260	.522	-.378	-11.994	.000	.941	1.062
	Stock Beta	1.425	1.105	.052	1.289	.200	.564	1.772

a. Dependent Variable: Stock Return

For the Multiple Regression OLS model, stock risk, beta, consistency and market cap should be independent of each other. The collinearity diagnostics exhibit high eigenvalues and not a single Condition Index item is greater than 12. Looking at VIF, the values are close to 1 and none touch 5. We can conclude that the factors are independent. The Multiple Regression OLS model reports that this model is significant with an explanatory power (Adjusted R^2) of 0.903. Testing the t-statistic for independent variables, stock risk and consistency are found significant but beta and market cap are not significant. One possible explanation for this could be that the relationship between return and beta may not be linear. Besides there may be outliers in market cap categories that could be causing more variance in the predicted value. Hence, we proceed to take a deeper look at all 105 data points using Scatter Plot.

Scatter Plots and Regression Lines Based on Market Cap Sub-groups

A: Stock Return and Stock Risk

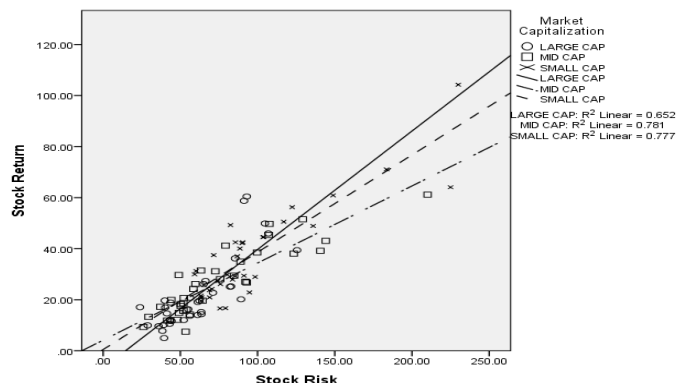


Chart 4: Scatter Plot and Regression Lines of Stock Risk and Stock Return

The above chart plots all 105 pairs of stock return and stock risk, distinguishing the data points based on the market capitalization of the company. Regression lines drawn for these sub-groups reveal that 65% of variance in return of a large cap stock can be explained by its risk. 78% of variance in return of mid-cap and 77% of variance in return of small cap can be explained by stock risk.

B: Stock Return and Consistency or Coefficient of Variation

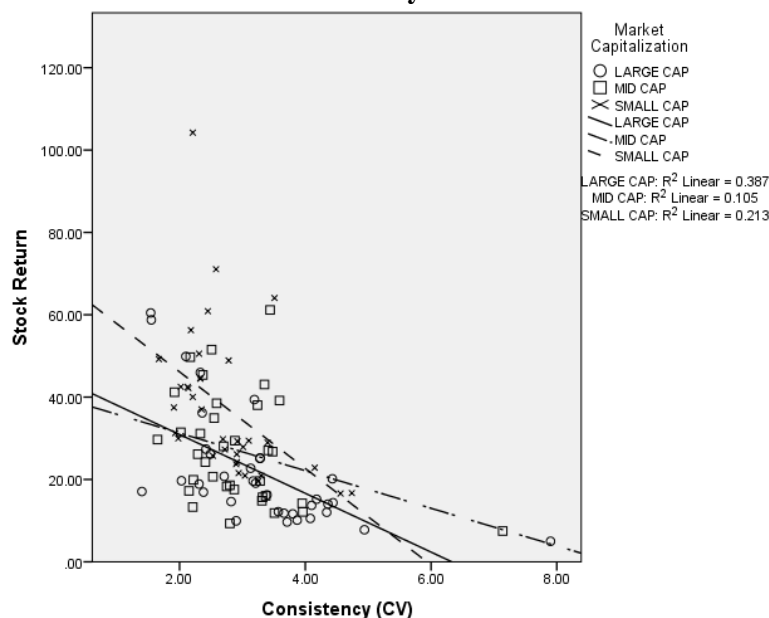
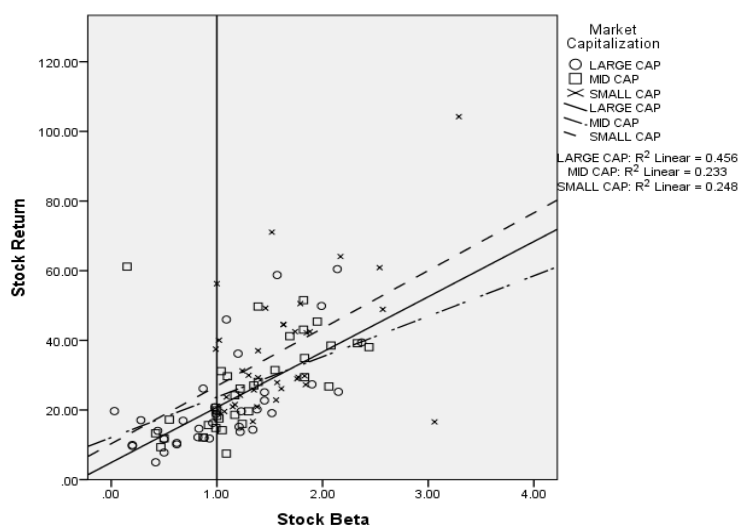


Chart-5: Scatter Plot and Regression Lines of Consistency and Stock Return

The chart above accurately depicts a negative relationship between stock returns and consistency. Small cap stocks seem to have the steepest negative slope. As per Regression lines, 38.7% variance in stock return can be explained by the coefficient of variation or consistency. This explanatory power is lower for mid-cap (10.5%) and small-cap (21.3%).

Chart-6: Scatter Plot and Regression Lines of Stock Beta and Stock Return



The above chart depicts that a good number of stocks are clustered near $\beta=1$. However, there is no clear pattern about which market cap stock tends to be aggressive. Consequently, the regression lines indicate the explanatory power of beta. For large cap, 45.6% of variation in stock returns can be explained by the stock's beta. But beta is not a very good indicator for small-cap and mid-cap returns, having an explanatory power of only 24.8% and 23.3%.

In conclusion, this study supports the findings of Chaudhuri et al (2016) that large cap stocks on BSE have greater market efficiency compared to mid-cap or small-cap. Also, not all explanatory variables are significant across differing market capitalizations.

CASE-WISE DIAGNOSTICS

Case No.	Company Name	Mkt. Cap	Std. Residual	Stock Return	Predicted Value	Residual
5	Shree Cement Ltd	Large	3.221	60.46	43.9545	16.50549
16	Indian Oil Corp. Ltd	Large	4.093	4.99	-15.9879	20.97791
22	Eicher Motors Ltd	Large	3.165	58.75	42.5307	16.21933
78	BLISS GVS Pharma	Small	3.229	104.24	87.6945	16.54551
A. Dependent Variable: Stock Return						

The case-wise diagnostics clearly portray four outlier stocks that are over-valued when compared to their predicted stock returns. This is a clear indication of a bias in Behavioral Finance called as Representativeness Bias. This is a faulty cognitive heuristic based on the presumption that once stocks are categorized, all members of a category share all the same attributes as others in the category. This results in stereo-typing, consequently investors shy away from small-cap stock assuming poor management or poor growth prospects, thus missing out on growth opportunities as pointed out by Sontakke, K. A. (2016). Some small cap have the potential to grow and progress to an upgrade category of market capitalization. In the case diagnostics, it is clear that despite Shree Cement, IOC and Eicher Motocorp belonging to large-cap category, they have very high risk profiles being 93.02%, 39.47% and 91.23%. Also IOC has very poor consistency with a cv of 7.9 with an unusual combination of low beta (0.42). Shree Cement too, despite being a large cap stock, has an aggressive beta of 2.14. On the other hand, BLISS GVS is a small-cap company that has an unusually high 20 year average return of 104.24% and a risk of 229.97%. It is an aggressive stock with beta of 3.29 and low consistency of 2,21. Thus investors are advised to dig deeper to understand firm's business strategy and financial indicators, without relying too heavily on market-cap expectations of risk and return.

SUMMARY FINDINGS

Based on the empirical analysis, the following results are being documented regarding the hypotheses testing being conducted by the study:

1. Alternate Hypotheses 1 to 4 are accepted and it is concluded based on t statistics that stock return is insignificantly correlated each to market capitalization, stock risk, consistency and stock beta.
2. The predictor variables of stock risk, stock beta, market cap and consistency are found to be statistically independent of each other, depicting no multi-collinearity.
3. Multiple Regression OLS model for Stock Return based on the four predictor variables was found to have an explanatory power of 90.3%. However, the explanatory variable of market capitalization was not found significant. This makes market cap investing strategy problematic.
4. Scatter plots and Simple Regression models were constructed to isolate the explanatory power of each factor for each market cap sub-group. Each of the three models have shown greater predictive efficiency for large cap stocks. The same is not observed for small and mid-cap stocks.
5. Threat of Representativeness bias exists when adopting market cap investing strategy. The empirical analysis has highlighted outlier stocks that despite being large-cap are neither consistent nor less risky. Small cap stocks too can be suffering from a bubble effect or manipulative trading resulting in unjustified over-pricing. The predictive model reveals the expected returns.

CONCLUSION

The current empirical study was conducted based on annual stock returns of a 20 year period covering 105 listed companies of BSE, equally divided among large-cap, mid-cap and small-capitalization. The variables chosen for the study were: stock returns (dependent variable), while stock risk, stock beta, consistency and market cap were assumed to be independent variables. The study has raised important red flags while adopting market cap investing strategy. Though market cap is found to be an explanatory factor, its explanatory power varies between categories and across times. Investors are given a fair warning to avoid using this lone criterion in their investment strategy. Large cap stocks are found to be more information efficient, yet outliers do exist in this category as well.

The empirical findings of this study are useful for retail investors, institutional investors, students of Investment Finance and regulatory bodies of capital markets. The recommendation to retail investors is to avoid looking at market-cap categories as a homogeneous set and avoid representativeness heuristic. Since BSE is not yet weak

form of EMH as reported by Tripathy (2011) and there exist opportunities to benefit by privy information or publicly available financial data as well as historical stock prices, investors need to exercise caution as unsystematic risks could adversely impact returns of small sized portfolios. Institutional investors could keep an eye for larger sized, industry front-runners in the small cap or mid-cap categories and stay vested for about 10 years, within which time these stocks could move to the next upgraded market-cap. Regulators need to look into the market transactions of unusually high risk-return stocks, or stocks that have unlikely combinations such as unusually high risk linked to very poor returns, low beta and low consistency. Such a stock could have weak fundamentals or may be victim to market hearsay.

The study is limited in its factors and period of study. A study with greater depth and width may provide further incisive analysis. Future research could be undertaken to explore market capitalization upgrade on investor perception and stock returns. Algo-trading and pricing anomalies in varying market cap subgroups could also constitute an interesting study.

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THE AFFECT OF EXCHANGE RATE AND CRUDE OIL ON GROWTH RATE OF INDIAN ECONOMY

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ABSTRACT

The Economy status of the country is known by the GDP of that country. GDP act as the indicator which tells whether a country is developed or developing. Growth of an economy depends upon the availability of natural resource, savings of the people living in the country, investment made by the people, availability of labor force and technological advancement of the country. The Exchange rate is the value of one nation currency in terms of foreign currency. The exchange rates involve two countries' currencies, domestic and foreign it's quoted in direct, indirect and cross currency mode. Crude oil is the natural resource which is not refined in nature and it consist of hydrocarbon deposits and other flame able particles. Crude oil is used to extract several products like petrol, gasoline diesel and other products. In this paper we established the relationship between the selected variables (Growth rate, Crude oil and Exchange rate), Using ANOVA and Regression analysis were generated in micro-soft excel. The analysis was made in such a way to find out the effect of independent variable on the dependent variable for both the periods i.e. pre and post liberalization.

Keywords: Growth, Exchange rate, Crude oil, ANNOVA and Regression.

INTRODUCTION

The Economy status of country is known by the GDP of that country. GDP act as the indicator which tells whether a country is developed or developing. Many think that growth and development are one and the same, but there is a lot of difference between them. Growth refers to increase in the total production of the economy and development refers to increase in the quality of life because of increase in the monetary value. Growth often occurs when there is good amount of natural resource, quality workforce, capital investments and latest technology. Development is measured by the standard of living of the people, health and education.

Exchange rates

The Exchange rate is the value of one nation currency in terms of foreign currency. The exchange rates involve two countries' currencies, domestic and foreign it's quoted in direct, indirect and cross currency mode. In direct quotation a unit of foreign currency is expressed in terms of domestic currency. In indirect quotation a unit of domestic currency is expressed in terms of foreign currency. But in cross currency quotation exchange rate is quoted in another nation's currency.

Crude oil

The Crude oil which is very important for daily function of human race. The Crude oil is used for different purpose such as Production, Fuel, Energy generation etc. The fluctuations in Crude oil prices will affect the economy either in positive sense or in negative sense. The increase in price will generate more income to the government which can be diverted to those sectors which are running in losses and if it continues to rise after certain point it will lead to decrease in consumption not only as fuel but also in energy generation sector and many other sectors.

REVIEW OF LITERATURE

1. **N Selimi, V Selimi (2017)** in the study analyzed empirically the effects of exchange rate on economic growth in the FYROM. They applied the OLS approach to estimate the regression equation and present the model that analyzes the impacts of exchange rate on economic growth. Further, it is made a long-term analysis of the linkage between real exchange rate and economic growth, using dynamic VAR model and Granger causality test. The empirical results indicate that real exchange rate positively affects the economic growth. Thus, we found out relevant argument that support the current regime i.e. fix regime of the exchange rate which ensures macroeconomic stability of the country.
2. **MA Razzaque, SH Bidisha (2017):** in the article aimed to understand the effects of exchange rate movements on economic growth in Bangladesh. Using a suitable analytical framework to derive an empirical specification, they constructed a real exchange rate series and employed co-integration techniques to determine the output response to Bangladeshi currency depreciations. Our results suggest that in the long run, a 10 per cent depreciation of the real exchange rate is associated with, on average, a 3.2 per cent rise in

aggregate output. However, a contractionary effect is observed in the short run so that the same magnitude of real depreciation would result in about a half per cent decline in GDP.

3. **L Ghalayini (2011):** in the study investigated the existence of theoretical and empirical understanding of the macroeconomic consequences of oil price shocks have been focused on the US economy. In contrast to these studies, the purpose of this paper is to investigate whether economic world growth can be explained by changes in the oil price. They also investigated if there are any differences in oil price effects on economic growth between different countries and group of countries. A possible reason for these differences was oil exports/imports countries. For the oil importer countries, oil price increase and economic growth are negatively correlated while all things being equal, the relation is positively correlated for oil exporter countries. The data used in this paper covers the G-7 group, OPEC countries in addition to Russia, China and India.
4. **G Aaron, N Sherzod (2009):** In study stated that in the year of 2008, the world has experienced historically high oil prices reaching an all time high of 147 USD per barrel in midsummer. How reliable oil price is as an economic variable predicting fluctuations in GDP growth remains controversial. Several models have been developed by scholars targeting different relations between oil price and GDP growth, from its effects on stock markets to its effect to unemployment. The time series from 1993-2008 is used to draw the conclusion. The U.S.A consumes 25% of the oil produced in the world and on the contrary Sweden consumes less oil per-capita when compared to other developed countries were chosen to compare their GDP sensitiveness to oil price volatility. The bivariate results does not show a pattern of negative correlations for Sweden between GDP growth and real oil price increases, however the U.S.A showed to be more sensitive to oil price increases.

OBJECTIVES

- 1) To study the factors influencing GDP growth rates i.e. Exchange rates and Crude oil
- 2) To compare the pre-recession and post-recession influence on the factors on GDP Growth rates.

NEED FOR STUDY

This study is very important to macro-economists, financial analyst, policy makers and other officials in understanding the Growth changes in accordance with changes in price level and thus come up with relevant policies so as to keep prices as the reasonable rates that stimulate production. The study also helps in understanding the framing of policies and implementation.

SCOPE

The study focuses on time series data from Jan 1968- Dec2017. The study mainly focuses on emphasizing the relationship of economic growth rate with factors effecting growth rate in macro-economic perspective. The policies implemented and the measurements taken to control these factors and maintain stability in the country.

METHODOLOGY

The data for the purpose of study has been collected from various secondary sources such as Statista, OECD, World bank, Economic trends and other websites. For establishing the relationship between the selected variables (Growth rate, Crude oil and Exchange rate), ANOVA and Regression analysis were generated in micro-soft excel. The data has been taken from 1968 to 2017. The entire analysis was divided into two sections i.e. Pre liberalization spanning from 1968-1990 and Post liberalization for the time period of 1991-2017. The analysis was made in such a way to find out the effect of independent variable on the dependent variable for both the periods i.e. pre and post liberalization.

DATA ANALYSIS

The data analysis was made using data analysis option in Microsoft Excel Data menu. The data analysis option provides advanced statistical tools such as Regression, Correlation and ANOVA etc that can be used for advanced data analysis. Table1 presents the picture of data regarding the Pre liberalization values of growth rate, crude oil, exchange rate.

Table-1: (Pre-Liberalization)

Years	Growth Rate(Y)	Crude Oil (X ₁)	Exchange Rates(X ₂)
1968	3.388	-2.401746725	0
1969	6.54	-0.850111857	0
1970	5.157	-3.519855596	0
1971	1.643	1.824134705	-0.106666667

1972	-0.553	-3.169499311	1.361452216
1973	3.296	23.19734345	1.948907032
1974	1.185	78.47516365	4.64996125
1975	9.15	19.7626753	3.381881017
1976	1.663	1.53125563	6.972301815
1977	7.255	3.140525195	-2.466517857
1978	5.713	-3.423361431	-6.247854446
1979	-5.238	49.3765586	-0.817771268
1980	6.736	32.721202	-3.236524735
1981	6.006	-13.40521114	10.12336258
1982	3.476	-16.1651795	9.19274743
1983	7.289	-11.52227723	6.811210999
1984	3.821	-5.217512939	12.5160907
1985	5.254	-9.592680047	8.853295785
1986	4.777	-47.37185766	1.956504164
1987	3.965	18.61042184	2.775354849
1988	9.628	-19.40376569	7.375974076
1989	5.947	17.39130435	16.59121937
1990	5.533	19.73466003	7.870085049

Source: OECD, World bank.

Here we applied Analysis of variance with single parameter to test the effect of growth rate, crude oil and exchange rate through MS-Excel.

ANOVA table(pre- liberalization)					
	d. f	SS	MS	F	Significance F
Regression	2	36.472	18.236	1.862	0.181
Residual	20	195.846	9.792		
Total	22	232.318			

CONCLUSION

From the above ANOVA table we conclude that there is no significant affect of growth rate on Crude oil and Exchange rate.

To test the relationship of growth rate on crude oil, exchange rate, we used multiple regressions

	Coefficients	Standard Error	t-Stat	P-value
Intercept	4.465	0.832	5.363	0.000
Crude oil (X1)	-0.047	0.026	-1.795	0.088
Exchange rate(X2)	0.057	0.122	0.465	0.647

$$\text{Growth rate (y)} = 4.465 - 0.0047(\text{crude oil}) + 0.057(\text{Exchange rate})$$

Conclusion

From the above multiple regression model we conclude that the Growth rate is less negatively affected by crude oil and positively affected by Exchange rates.

The p-value of crude oil is significant at 10% level of significant

Table-2: (Post-Liberalization.)

Years	Growth Rates (Y)	Crude Oil (X ₁)	Exchange Rates(X ₂)
1991	1.057	-16.18190212	29.93201166
1992	5.482	-7.51858992	13.96535045
1993	4.751	-15.45562835	17.65182499
1994	6.659	-8.911588588	2.889187682
1995	7.574	4.060324826	3.356282272
1996	7.55	18.58045336	9.270052734
1997	4.05	-10.9056722	2.483560523

1998	6.184	-37.07351389	13.6204665
1999	8.846	35.71827837	4.352989651
2000	3.841	60.29654036	4.382766229
2001	4.824	-18.26824255	4.993102221
2002	3.804	-2.483495756	3.017844276
2003	7.86	18.79432624	-4.169923884
2004	7.923	32.34735414	-2.71987635
2005	9.285	28.48062333	-2.683378939
2006	9.264	12.94286626	2.736961451
2007	9.801	6.909707503	-8.735956916
2008	3.891	37.0208829	5.2141527
2009	8.48	-41.24626218	11.26307321
2010	10.26	31.22639961	-5.534552216
2011	6.638	18.51620168	2.064470979
2012	5.456	-2.670748443	14.49967859
2013	6.386	3.893709328	9.658102064
2014	7.41	-7.641716254	4.150312297
2015	8.154	-51.14728156	5.115516959
2016	7.113	-14.34521055	4.743421873
2017	6.624	37.33117234	-3.085050971

Source: OECD, World bank.

Same procedure is applied for Post- liberalization; first we tested the effect of growth rate crude oil and exchange rate through MS-Excel.

ANOVA table (post liberalization)					
	d. f	SS	MS	F	Significance F
Regression	2	55.6754	27.8377	9.7261	0.0008
Residual	24	68.6921	2.8622		
Total	26	124.3674			

Conclusion

From the above ANOVA table we can conclude that there is a significant affect of growth rate on Crude oil and exchange rate.

To test the relationship of growth rate on crude oil, exchange rate, for Post liberalization we used multiple regressions

	Coefficients	Standard Error	T -Stat	P-Value
Intercept	7.7793	0.4284	18.1582	0.0000
Crude oil (X1)	-0.0190	0.0142	-1.3396	0.1929
Exchange rates(X2)	-0.2018	0.0466	-4.3345	0.0002

$$\text{Growth rate}(y) = 7.7793 - 0.0190 * (\text{Crude oil}) - 0.2018 * (\text{Exchange rates})$$

Conclusion

From above model we conclude that growth rate is negatively affected by exchange rates and crude oil. The p-value of exchange rate more significant at 5% level of significant

Finally we conclude that growth rate is significant effect on crude oil in pre-liberalization and growth rate is significant effect on Exchange rate in Post- liberalization.

CONCLUSION

From the above Table (1) it is evident that there is no significant relationship of growth rate on the selected variables i.e. exchange rate and crude oil, but there is a negative effect of the crude oil growth rate but exchange

rate is effecting in positive way. But after liberalization there is a significant relation between growth rate and the selected variables.

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BUSINESS ENVIRONMENT IN VUCA WORLD

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ABSTRACT

The business world has become more VUCA than ever. VUCA is a popular acronym to describe today's business environment. In the present VUCA business environment the ability of organizations to formulate strategic decisions appears to be crucial for organizations to survive. This paper elucidates the reader about the acronym VUCA to characterize the contemporary environmental conditions. More value is created by new business models by adapting to new markets, developing new businesses, inventing new products. Impact of VUCA on strategic decisions is impossible to assess. It is important for managers understanding their environment to develop strategy and brings awareness of the impact their decisions have on the environment. The leaders realize that a sustainable future is possible if businesses can sense, adapt and respond to change. To sustain in VUCA world needs adapting new business strategies by the organizations. Though there is rapid changes going on in business environment, but business strategies are not updated. In this article, author discusses new tools and framework for management to cope with the new situation.

Keywords: Business environment, VUCA, strategy.

INTRODUCTION

"Today is hard, tomorrow will be worse, but the day after will be beautiful"-Jack Ma.

We are living in world of constant change and overloaded information. The world has become very unpredictable. Trial and error has become the way in the fast changing sectors of the economy. It has led to design thinking and customer centric design. Companies have to change more-different business models, different company structure, different employee profiles, different leadership and different ways of interacting with each other. Businesses are referring more to this changing environment with the term VUCA. We are currently at the edge of significant changes in organizations driven by information technology and the internet.

OBJECTIVES

The aim of this paper is to describe and explain the effect of business environment on the strategic planning process and decisions of the organization in the VUCA world.

RESEARCH GAP

There is not enough empirical evidence about how organizations shape their strategy considering the contemporary business environment. It is difficult to assess relation between business environment and strategic planning empirically.

METHODOLOGY

The article is based on secondary data and information collected from news clips and records, business news letters, journals, data available through various websites.

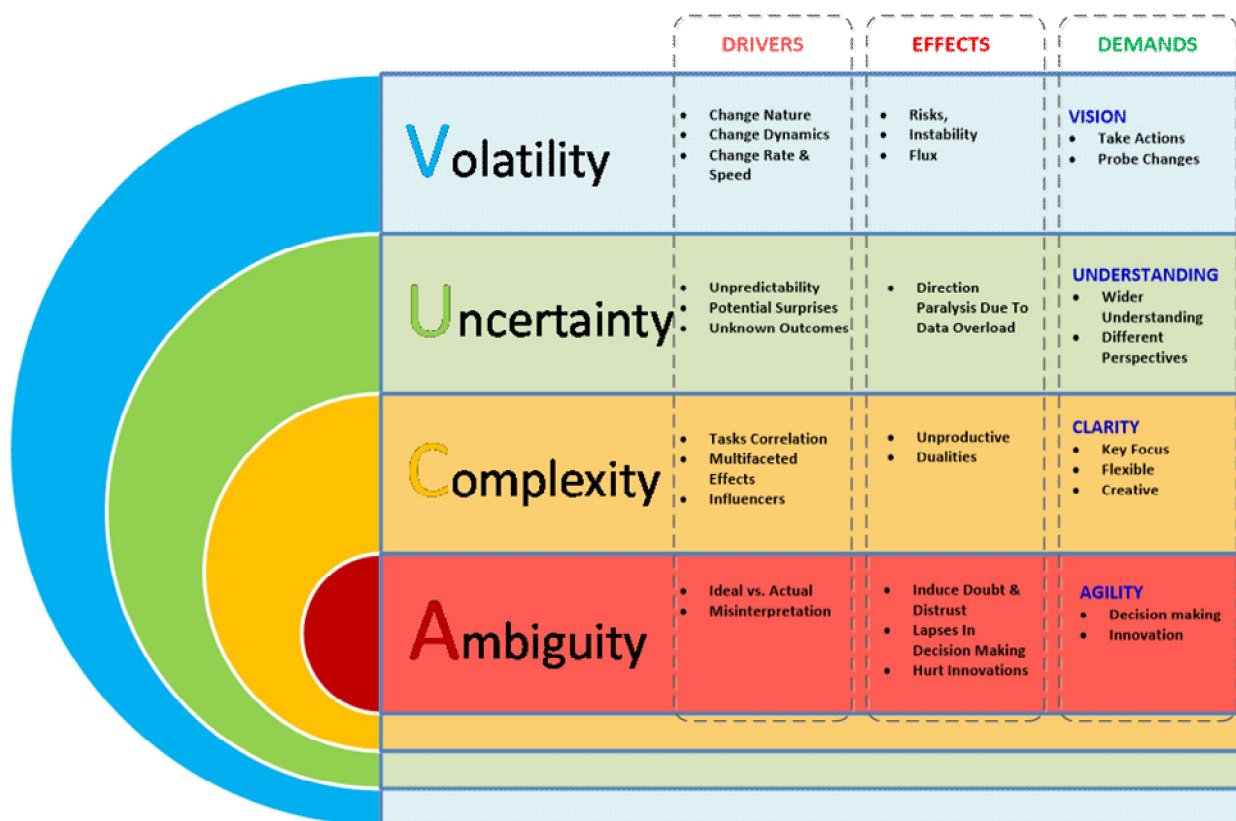
VUCA- MEANING

VUCA is an acronym coined by the US Army war College at the end of the cold war. It stands for volatility, uncertainty, complexity and ambiguity. After the terrorist attacks of September 11, 2001 in USA, VUCA started to be associated with environmental conditions where organizations operate. The acronym really gained importance at the beginning of the financial crisis in 2007-08.

- **Volatility:** it refers to rate, magnitude, volume and dynamics of change. Since 2002 financial turbulence has increased in intensity. The main drivers of volatility are scale of social interaction, population's growth and its demands, global competition, digitization, trade liberalization, business model innovation, technical developments, innovation in products or processes. In this volatile business environment business plans become obsolete very quickly. Real life examples are increasing price fluctuations on global raw materials market or stock market. The situation is unstable and maybe of an unpredictable duration. Facebook in 2014 acquired instant messaging app WhatsApp (a start-up tech company that did not even exist in 2008, with only 55 employees) for \$19 billion.
- **Uncertainty:** the uncertainty prevailing in the environment makes organizations in decision making process. It includes lack of information, abundance of information, beliefs, and conflicting evidence. Due to globalization, relatively small cause can have huge worldwide consequence (butterfly effect). It calls for active monitoring of the environment, gathering information and processing, and forecasting tools, open

communication. Lack of clarity makes difficult to evaluate situation properly to identify challenges and opportunities. There is lack of predictability of issues and events; for example, sudden launch of product similar but superior by rival. This rise of china and its large military forces: does it mean for geopolitical stability in the pacific region.

- **Complexity:** it arises due to interactions of too many variables acting simultaneously like brains, language, social and cultural systems, markets. Organizational environments are complex in many sphere-internals, transactional, contextual. The environmental complexity includes enhanced competition, globalization, rising outsourcing, more sophisticated products, information technology revolution. In an interconnected environment, sometimes external conditions and inputs can lead to very different putput of the system. Real life examples are organization where the same inputs can cause very different outputs at different point of time. Unique tax and regulatory environment, tariffs and cultural expectations associated with doing business in several countries creates complex business environment.
- **Ambiguity:** it is an intermediate state between ignorance and risk. It refers to lack of clear information-cause and effect being unknown. Interpretation of situation cannot be resolved according to rule. In real life, business decisions become more ambiguous, there is more than one solution to a problem and there is no analytical process to decide which option should be selected.



VUCA PROBLEMS IN BUSINESS PROJECTS

Some of the problems that may come up in any organizations are

- Production obstructed due to material not reaching on time
- Delayed approvals from the manager leading to delays in work.
- Insufficient workforce
- Material handling equipment not reaching in time
- Sudden changes in ground situation leading to rework
- Team member falling sick or leaving, leading to disrupted timeline
- Design revision due to inferior quality
- Excess materials dumped

VUCA WORLD-BLACK SWAN EVENTS

Black swan concept and theory was first developed by statistician and risk analyst Nassim Nicholas Taleb in his books “**Fooled by Randomness**” and “**The Black Swan**”. Black swans events are low probability events which have unpredictable impact. They are impossible to foresee. Past few years, world has witnessed many such events which shook up businesses such as collapse of Lehman Brothers and the banking crisis and sharp reduction in the oil price.

In VUCA world, fluttering of butterfly in one part of the world, can create chaos and over time may storm the world, scientists have explained how minute differences in data may eventually lead to massive changes like in weather, natural disasters, human behavior and economics. In such a world leadership must be flexible and adaptable; otherwise failures are bound to happen.

The unprecedented number of disruptive events has made 2016 the year of black swans. In November 2016, Demonetization was announced by government. It was truly a black swan event, which disturbed lives of majority of Indian people and the calculations of even corporate sector. Such random decision leads to chaos and has long term impact.

VUCA FAILURE IN INDIAN ECONOMY

In India, since liberalization in 1990's, economy witnessed large organizational failure due to their growth strategy leveraged through high debt. Many entrepreneurs took more risk to grow fast due to unshackling of the economy. They took huge debts for funding expansion, diversifications and acquisitions. In VUCA world, since the future is unexpected, one has to start slow, build up the necessary speed and use variability of speed as a strategy of growth. Few such big companies' are-

- The decline and fall of SKS Microfinance
- Workchart Limited
- Jain Irrigation Systems
- Shree Renuka sugars
- Leela hotels
- Suzlon and GMR: the curse of easy money
- Kingfisher Airlines: Going down celebrity style
- Future Group
- Subhiksha and Vishal Retail
- Ranbaxy Laboratories Limited : conspiracy of silence
- NANO and Akash tablet: Juggad does not always work

All unpredictable events are not black swan; to look into future one must follow **Foresight-Insight-Process**. When there is ambiguity and uncertainty, there is no ability to predict and control. Planning must be flexible to be adaptable. It calls for strategic planning. We should prepare our organizations to make some possible predictions. Any disruption in market would affect all businesses. If we are not thinking and start planning and preparing, it will hit us hard. We cannot predict the future but ensure that next generation is not burdened with sudden event but leverage all such disruptions.

Failure is substantial gap between expectations and results. Resilience is the ability to bounce back from adversity, setbacks and failures. It is major determinant of success. Failure is not catastrophe, but failure to learn may be. Today, many companies worldwide are on the path of failure, even major electronics brands from Japan. Failure is inevitable part of human journey. Lessons must be learned and used as stepping stones to greater heights; one can easily transcend failure and ready to face the VUCA world. Indian Drugs and Pharmaceuticals Ltd (IDPL) failed, but scientists and executives working there learned from its failure and went on to establish Hyderabad's pharmaceutical industry called Dr Reddy's.

ADDRESSING RISK OF VUCA WITH VUCA PRIME

“Every organization must be prepared to abandon everything it does to survive in the future” -Peter Drucker.

VUCA is not gloom. Though it provides threats, it also offers opportunities, if one can translate VUCA as vision, understanding, clarity and agility. **VUCA prime** framework was proposed by **Bob Johansen** in 2007.

Businesses can use VUCA for identifying risks and they also use VUCA-Prime to help them respond effectively. The forces of VUCA and VUCA prime exist in dynamic equilibrium. The dynamic interplay of both generated the forces that can drive organizations to adapt, change, and evolve with the conditions of business environment-sum total of political, economic, social, technical and regulatory.

- **Vision:** when things are changing drastically, it is important to keep clear focus on the vision. Emphasis should be on objectives to ensure risks are responded well. Vision rises above volatility. Businesses must view today from the perspective of the desired future.
- **Understanding** reduces uncertainty. Whenever uncertainties are encountered, exploration and experimenting increases understanding. Organizations must be able to learn, unlearn and relearn; exercise and encourage listening, empathy and sensing. With deeper understanding of business environment, we can move forward with clarity and confidence.
- **Clarity** counters complexity. In confused situations, focus must be on core element of situation. Problems must be simplified as much as possible. It's about rapid problem solving and decision making. Critical and creative thinking must be highly developed and encouraged.
- **Agility** overcomes ambiguity. It helps to retain freedom and allows flexible responses to changing circumstance. Options must be kept open. When future contains multiple alternatives, organizations must be ready to adapt. They must be able to communicate across the network-collaborating with others

Business actions taken in VUCA world

- Retain clear vision, direction and consistent messaging
- Anticipate risks and minimize investment in long term strategic plans
- Encourage networks, not hierarchies
- Trust the specialist expertise and judgment of those around you
- Leverage diversity in the workplace for competitive advantage.
- Value new, short-term solutions
- Be curious, intuitive and innovative
- Get used to being uncomfortable.

DEMONETIZATION-AMBIGUOUS SITUATION

The demonetization that occurred in November 2016 in India was classic case of an ambiguous situation. The government of India announced the withdrawal of all 500/ and 100/ rupees banknotes and they were declared as no more legal tender money. The government claimed that it would curtail the shadow economy and crack down on the use of illicit and counterfeit currency to fund illegal activity and terrorism.

However, the situation became very volatile. The scarcity of cash due to failure of timely printing of new currency in large amounts led to chaotic situation. People holding old banknotes faced difficulties in process of exchange of old notes from banks and wasted critical time due to endless queues outside banks and ATMs across country. This led to confusion which could have been avoided. It only depicted the failure of connected agencies to cope with the situation.

There was no proper response and many inappropriate changes for rules of RBI created ambiguous situation. It caused lot of disorder in the system creating stress among common man and banks. Many small scale and village industries were severely hit due to the currency crisis.

CONCLUSION

VUCA might be a relatively old term; it sets the scene for future organization. Business models, strategies and organizational models will have to change. Leadership skills will become more important. Indians should not fear the VUCA world, for they have enough wisdom to overcome the challenges posed by it. VUCA world will move quite fast, without anyone taking notice of it.

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THE RELATIONAL AND THE RATIONAL - AN EMPIRICAL STUDY ON THE IMPACT OF INDEPENDENT VARIABLES ON MARKET PRICE OF SHARES WITH SPECIFIC REFERENCE TO AUTOMOBILE INDUSTRY

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ABSTRACT

The stock market's dynamic nature has always made investors face the challenge of accurately predicting share price movements so as to earn decent returns on their investments. The volatility, caused by both, internal and external factors, is a cause of concern to risk-averse investors. The focus of the study is to see the relation between the dependent variable, Market Price per Share and the independent variables, namely, Earnings per Share, Dividend per Share and Price-to-Earnings Ratio as a group and individually, to examine which variable plays a major role in influencing the market price per share. The sample of the study consists of four companies from the Indian Automobile sector, namely, Maruti Suzuki India Ltd., Mahindra & Mahindra Ltd., Hero Moto Corp Ltd., and Bajaj Auto Ltd. for a select period of 2013-2014 to 2017-2018. The study employs the statistical tools including Correlation, Multiple Regression and t-test analysis. The result analysed through multiple regression states that there is a positive impact of the independent variables on the dependent variable. However, the t-test results throw light on whether such dependence is significant or not. The study concludes that Price-to-Earnings Ratio significantly impacts market price movements of shares of select companies for the period under consideration.

Keywords: Relational (Concerning the way in which two or more things/variables are connected), Rational (Able to think sensibly and logically), Earnings per Share, Dividend per Share, Price-to-Earnings Ratio, Market Price per Share.

1.1 INTRODUCTION

As Philip Fisher said, "The stock market is filled with individuals who know the price of everything but the value of nothing." The stock market, being the backbone of contemporary economies, is all about dynamics. The investors are, thus, often faced with the challenge of predicting share price movements, which is far from simple. Investments in equity shares is one of the most liquid form of investments, the market price of which is the most important factor affecting investment decisions.

Investors usually follow two approaches while predicting share prices, namely, fundamental approach and technical approach. While the former has financial, environmental and managerial factors as the basis of prediction, the latter studies past trends in predicting future share prices.

1.2 REVIEW OF LITERATURE

Kumar P.¹ (2017) examined the impact of earning per share (EPS) and price earnings ratio (P/E ratio) on share prices of auto sector companies. This study analyses the extent to which these factors affect MPS using Multiple Regression Analysis. It was carried out for a sample of eight companies for a period of five financial years, from 2011-12 to 2015-16.

The study concluded that earning per share had a strong impact on market price of share of select companies and price earnings ratio impact significantly on the prediction of market price of share. The study, however does not consider external influential factors which may affect the performance of market price of auto sector shares.

A.R. Aryasri² (2017) analyzed to what extent Earnings per Share (EPS), Dividend per Share (DPS) and Price Earnings (P/E) Ratio can be used as a significant explanatory variable for predicting Market Prices of shares. The period of the study was 2012-2016 and it focused on seven auto companies listed on the National Stock Exchange (NSE).

Utilising the statistical techniques of Pearson's Coefficient of Correlation, Multiple Regression Analysis and Analysis of Variance, the study concluded that Price-to-Earnings Ratio is the most influential variable in predicting share price movements. The second most impactful variable suggested by the study was Dividend per Share. The results of this study differed from similar studies of the past in the regard that Aryasri concluded EPS was the least influencing variable. The study further goes to suggest that the investors must be aware of these variables before buying and/or selling the equity shares on the ex-dividend day.

1.3 STATEMENT OF PROBLEM

Various theories suggest that the market price of shares depends on factors such as dividend per share, dividend payout ratio, dividend yield, operating earnings, book value per share, management, size of the firm and many more. Many studies have been undertaken in developing countries to study these determinants. The question that prevails is which of these determinants has the greatest relevance to share price movements.

The statement of problem is:

“Dependence of market price movements of shares on select variables, namely, Earnings per Share, Dividend per Share and Price-to-Earnings Ratio.”

1.4 OBJECTIVES OF THE STUDY

The study is carried out with the following objectives:

- To study the impact of selected accounting variables on the market price movements of shares of select companies.
- To measure the degree and strength of association between the independent variables (namely EPS, DPS and P/E Ratio) individually, and market price of shares of select companies.

1.5 RESEARCH METHODOLOGY

The research methodology used for the study is as follows:

- **Data Collection:** The study has been carried out using secondary sources. The financial ratios are collected (EPS, DPS and Market Prices) from financial statements available at www.moneycontrol.com and market prices are collected from www.nseindia.com with the help of which further computation is done.
- **Sampling Techniques:** The technique of purposive (or judgmental) sampling has been applied while selecting the four actively traded companies in the Indian automobile sector, namely, Maruti Suzuki India Ltd., Mahindra & Mahindra Ltd., Hero Moto Corp Ltd., and Bajaj Auto Ltd.
- **Period of the Study:** The study is limited to a period of 5 years, that is, 2013 – 2018.
- **Tools Used:** Statistical Analysis techniques including Correlation, Multiple Regression and t-test Analysis have been used to analyse the data and are applied through Microsoft Excel and SPSS.

1.6 HYPOTHESIS FORMULATED

The following hypotheses (individually done for each independent variable) have been formulated and operationalised using t-test:

H₀ : The independent variables, namely Earnings Per Share (EPS), Dividend Per Share (DPS) and Price to Earnings Ratio (P/E Ratio) have no impact on the share price movements.

H₁ : The independent variables, namely Earnings Per Share (EPS), Dividend Per Share (DPS) and Price to Earnings Ratio (P/E Ratio) do have an impact on the share price movements.

1.7 DATA ANALYSIS

The collected and computed data were analysed through the statistical tools of Correlation, Multiple Regression and t-test Analysis. The results were as follows:

Table-1: Results of Correlation Analysis of Impact of Independent Variables on Market Price per Share

Name of the Company	Price/ EPS		Price/ DPS		Price/ P-E Ratio	
	r	r ²	r	r ²	r	r ²
Maruti Suzuki India Ltd.	0.9097	0.8276	0.9036	0.8165	0.8701	0.7572
Mahindra & Mahindra Ltd.	-0.8255	0.6815	-0.7202	0.5187	0.8391	0.7041
Hero Moto Corp Ltd.	0.9022	0.8141	0.8412	0.7076	0.3237	0.1048
Bajaj Auto Ltd.	0.6661	0.4437	0.8915	0.7948	0.5381	0.2896

Source: Calculation based on secondary data from www.nseindia.com.

EPS shows a negative correlation (-0.8255) among the independent and dependent variables in case of Mahindra & Mahindra Ltd., while a positive correlation exists in case of the other three companies. Similarly, DPS shows a negative correlation (-0.7202) among the dependent and independent variables in case of Mahindra & Mahindra Ltd. However, in case of P/E Ratio, there exists a high positive correlation for Maruti Suzuki and Mahindra & Mahindra and a moderate positive correlation for Hero Moto Corp and Bajaj Auto.

Table-2: Results of Multiple Regression Analysis of Impact of Independent Variables on Market Price per Share

Name of the Company	Multiple R	R squared	Adjusted R Square	Standard Error
Maruti Suzuki India Ltd.	0.993739006	0.987517212	0.950068849	542.6486977
Mahindra & Mahindra Ltd.	0.970095878	0.941086013	0.764344051	47.85670656
Hero Moto Corp Ltd.	0.999978339	0.999956679	0.999826717	8.922148245
Bajaj Auto Ltd.	0.995723213	0.991464717	0.965858867	83.43209829

Source: Calculation based on secondary data from www.nseindia.com.

The regression analysis result depicts that the selected variables significantly impact the dependent variable, that is, market price per share. In case of Maruti Suzuki, Hero Moto Corp and Bajaj Auto, about 90% - 95% of market price is determined by the select variables while the remaining variations are brought about by external factors.

Table-3: Multiple Regression and t-test Analysis Results

Company	Variable	Coefficient	Standard Error	t value	Critical Value	H ₀ at 5% LoS
Maruti Suzuki India Ltd.	Constant	-4173.8401	1857.7511	-2.2467	2.132	Accept
	EPS	13.7205	20.4601	0.6706	2.132	Accept
	DPS	16.0721	48.0799	0.3343	2.132	Accept
	P/E	230.1943	64.8606	3.5491	2.132	Reject
Mahindra & Mahindra Ltd.	Constant	-12259.8259	9325.3648	-1.3147	2.132	Accept
	EPS	157.1296	113.4626	1.3849	2.132	Accept
	DPS	7.2187	20.0949	0.3592	2.132	Accept
	P/E	371.0191	260.5011	1.4243	2.132	Accept
Hero Moto Corp Ltd.	Constant	-2663.1260	48.3125	-55.1229	2.132	Accept
	EPS	16.1913	0.3359	48.1961	2.132	Reject
	DPS	7.5691	0.7838	9.6576	2.132	Reject
	P/E	131.6961	2.0156	65.3377	2.132	Reject
Bajaj Auto Ltd.	Constant	-2697.2974	817.4708	-3.2996	2.132	Accept
	EPS	19.5586	11.3039	1.7302	2.132	Accept
	DPS	8.0458	48.2618	0.1667	2.132	Accept
	P/E	115.3048	32.3128	3.5684	2.132	Reject

Source: Calculation based on secondary data from www.nseindia.com.

The level of significance chosen for the analysis is 5% (i.e., $\alpha = 0.05$). The given degree of freedom is 4 ($n - 1 = 5 - 1$). At 0.05 level of significance and 4 degrees of freedom, the critical value, as computed from t-distribution is 2.132

From Table 3, it can be observed that the null hypothesis stands accepted in case of Earnings per Share and Dividend per Share. This implies that EPS and DPS do not bring a change in the market price of shares and are thus, independent of each other.

In the individual test, it is found that at 5% level of significance, the null hypothesis is rejected for one independent variable, namely, Price/Earnings Ratio. The null hypothesis, H₀, is "The said variables are independent of each other" stands rejected for lack of statistical evidence. This implies that the variables are not independent of each other and P/E Ratio has a significant impact on market price movements of shares of the selected companies and thus, H₁ is accepted.

1.8 CONCLUSION

The following are the conclusions drawn from the findings arrived at in this study:

- The Price/Earnings Ratio is the most correlated variable with market price of shares of the selected four companies. Thus, it is the main variable that investors must rely upon for making profitable investment decisions.
- As analysed by the t-test results, it is concluded that Earnings per Share and Dividend per Share have little or no impact on market price movements of shares of the selected companies for the period (2013-14 to 2017-18) under the purview of this study.
- Though EPS and DPS have shown a high coefficient of determination (r^2), the null hypothesis stands rejected as the relationship between EPS and MPS, and DPS and MPS is not statistically significant. The high regression coefficient between the independent and the dependent variables is because P/E ratio overshadows the effects of EPS and DPS.

The results of this study are not in line with various others that place emphasis on EPS significantly impacting Market Price of shares. However, there are various external factors as well, beyond the scope of this study, which may influence share prices in the market.

It must also be considered that the three selected variables, namely, Earnings per Share, Dividends per Share and Price/Earnings Ratio are only a few among the various quantitative and qualitative factors influencing share prices in the market. Hence, there is scope for further research and study in this area to describe the unexplained movements of share prices.

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SUSTAINABLE FINANCIAL GROWTH OF VARIOUS SECTORS OF BUSINESS IN VUCA WORLD

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ABSTRACT

Sustainable financial development is the attempt to satisfy the needs of business in a manner that sustains financial resources and the financial environment for future generations. There are difficulties in operating the business i.e. it has lot of changes, uncertainties, complexity and ambiguity. Even though the business is in VUCA, it has to maintain stability in running the business successfully in financial stability, if there is a presence of VUCA analysis. Here my study is about sustainable financial growth of business in VUCA world and my methodology of research is conceptual in nature. I have collected the data from secondary resources like websites, books, and journals. My Objectives of the study are as follows:

- a) To find a solution to the problem in various sectors of business.*
- b) To examine VUCA's help to business and its relevance to various sectors.*
- c) Gain of VUCA analysis by applying it in business.*

The above objectives of study are achieved through the following questions:

- a) Why VUCA is needed?*
- b) How VUCA is related to various sectors of business?*
- c) What did we gain by VUCA Analysis?*

Keywords: sustainable, stability, VUCA analysis.

INTRODUCTION

The present business world has financial issues and challenges. Business is sustaining financially even though it has many challenges due to many components called VUCA i.e. Volatility, Uncertainty, Complexity and Ambiguity. If we understand these components then it is possible to the business for sustainable financial growth of business in various sectors like Primary sector, Secondary sector and Tertiary sector.

THE WORLD OF VUCA**Volatility**

Volatility is the frequency of change. It is different expressions in different scenarios like volatility occurs in climate, in agriculture and in the field of business etc. In simple sense, volatility means a change. Volatility also occurs in various sectors like primary sector, secondary sector and tertiary sectors as far as my study is concerned.

Uncertainty

We all know that change is certain and here that is called uncertainty. Uncertainty is that which is unpredictable. We say "Future is uncertain" it is that we do not know the fact about the future events. In simple words uncertainty is called 'Risk'. In our daily life also we are very much associated with risk, we work with lot of challenges like a teacher, retailer, tailor etc. A teacher faces the problem of uncertainty whether the subject matter is reaching the student; a retailer faces the problem of uncertainty i.e. whether the products are according to taste and preferences of consumers. In simple sense life is associated with "risk".

Complexity

Generally we feel complex when there is a presence of confusion state, we also feel complex when we are associated with uncertainty i.e. risk. Facing the risk is complexity. Everything is complex if we complex. Complexity is involved in various fields like retail business, wholesale business, farmers etc. So here my study relates to the complexity that it involves in various sectors like primary sector, secondary sector and tertiary sector.

Ambiguity

If there is a presence of volatility, uncertainty, complexity then it ultimately leads to the position of Ambiguity. In our daily life there are certain situations with ambiguity. At the time of ambiguity we analyze all our past situations and we come across those situations. Ambiguity is also present in various fields of business. According to my study ambiguity is present in various sectors of business like primary sector, secondary sector and tertiary sector.

In the world of VUCA, here we are going to know about how various sectors are facing the challenges and how various sectors of business are sustaining financially in VUCA world and my objectives of the study are as follows:

OBJECTIVES OF THE STUDY

- To find the solution to the problem in various sectors of business.
- To examine VUCA's help to business and its relevance to various sectors.
- Gain of VUCA analysis by applying it in business.

***To find the solution to the problem in various sectors of business**

In order to study about this objective we have to find out the answer for the question "Why VUCA is needed?" With the help of VUCA analysis there will be a solution to the problem if there is a careful analysis of Volatility, Uncertainty, Complexity and Ambiguity. The first quality required for problem is understanding the problem. If there is stability in analysis then it acts as a medicine to volatility situations. Certainty is the medicine of uncertainty, knowing the fact that happening things are uncertain. Clarity acts as a medicine of ambiguity, if there is clarity in the case of ambiguity then ultimately leads to the reduction of complexity.

***To examine VUCA's help to business and its relevance to various sectors**

In order to examine this objective we have to find out the answer for the question "How VUCA is related to business and various sectors?" VUCA analysis is very much helpful to business of various sectors. Business has to face various challenges, VUCA analysis help to develop individual style and that leads to the development of business style. It also helps to empower the employees and understand and analysis of various situations likes volatility, uncertainty, complexity and ambiguity. It also helps higher level management to take decision in financial matters of various sectors like primary sector, secondary sector and tertiary sector.

***Gain of VUCA analysis by applying it in business**

To find out this objective we have to find the answer for the question "what did we gain by VUCA analysis?" The first gain according to my analysis is:

- Finding the solution to the problem with careful analysis
- Empowerment of employees in a concern.
- Sustainable financial growth is the major gain by VUCA analysis.

Now let us have a look on VUCA in various sectors of business like primary sector, secondary sector and tertiary sector in detail:

***VUCA in Primary sector**

Primary sector deals with the activities of agriculture, farming, hunting, mining, fishing and quarrying etc. It is the base for secondary sector and tertiary sector. The primary motive of primary sector is to produce raw material i.e. basic foods which are required for our livelihood. According to my study volatility occurs in primary sector. Now let us study about VUCA in Agriculture sector. In agriculture, farmers face the complexity because of volatility in seasons and fluctuation in prices of the products produced.

- Due to volatility the farmer may not estimate the proper yield as there are seasonal variations.
- The farmer may not expect a satisfied return because of price fluctuations i.e. condition of uncertainty.
- Because of uncertainty the farmer may be in a situation of not surviving, he is unable to survive if there is no proper yield and there is no reasonable return i.e. complexity.
- Finally the farmer is in a position of ambiguity whether to continue the farming; farmer is in confusion regarding the production of crop.

In the sector of agriculture, farmers play a major role. Here the major challenges of farmer are:

- Their survival in VUCA world?
- They are helpless in financial matters such as they are unable to repay the loans to financial institutions?
- Farmers may in a position of financial troubles if there are seasonal variations.

The farmer by analyzing VUCA he should be careful at the time of difficulty keeping the agricultural schemes of government in view. The government is helping the farmers in surviving by implementing the policies.

Schemes like Pradhan Mantri Fasal Bima Yojana in early 2016 help the farmer in providing the finance. This is a kind of insurance policy for farmers; it helps in survival of the farmer financially. The policy helps the farmer in providing the finance at the time of droughts and famines, the policy cannot get back the crop but this is helping financially. This policy helps farmers to sustain in agriculture by providing the finance. "Sustainable financial growth may lead to sustainable agricultural growth".

***VUCA in secondary sector**

Secondary sector deal with the industries like textile industries, construction industries and manufacturing industry etc. This is the second sector in our economy. The main motive of industrial sector is to obtain profits so that it can sustain financially even at the time of uncertainty. Secondary sector also faces financial issues in VUCA world. People should understand the condition of volatility and be stable then it is possible for the industry concern to sustain. Industries should think certainly about uncertainty i.e. risk. If there is a presence of volatility and uncertainty then it ultimately leads to the condition of complexity. If people have clarity about proper analysis of situations in business then there will no ambiguity. This industrial sector depends upon primary sector to some extent.

If we study textile industries like handloom industries, handicrafts etc also face the financial challenges to sustain in the market. Industries not facing the uncertainties nationally but also facing internationally i.e. at the time of exports and imports. They face complexities at the time of price fluctuations due to volatile market conditions. In order to sustain financially, industries have to think with stability and clarity in volatile conditions of market then there will be no ambiguity in times of uncertainty. For the purpose of sustaining and encouraging the textiles industries the government i.e. ministry of textile industries has introduced:

- Skill development schemes,
- Technology Upgradation fund scheme, jute sector schemes and
- Silk sector schemes etc.

With the help of these schemes industries grow sustainably and industries can sustainably grow financially with the help of VUCA analysis. "Sustainable financial growth may lead to sustainable industrial growth".

***VUCA in tertiary sector**

Tertiary sector deals with the services, it is also called as service sector. It involves services which are useful for production like transport services, distribution services, banking and insurance services etc. In this sector teacher, doctor, chartered accountants and lawyers etc also include as they provide service to respective clients. Here tertiary sector also faces the financial challenges due to volatile market conditions and therefore the industries may be in a position of uncertainty. If there is a presence of volatility and uncertainty then it automatically leads to complexity and ambiguity.

Let us study about the banking industry facing the challenges in VUCA world. Banking industry is the only industry which understands customers' needs and fulfills the needs of the customers. At the time of satisfying the needs of the customers, banks will face many challenges in VUCA world. Banking industry will face the condition of volatility due to changes in market conditions which is subjected to risk i.e. uncertainty. As we understood that volatility and uncertainty will automatically leads to the complexity and ambiguity.

The Major challenges as per my analysis which banks are facing. They are:

- No enough money
- Not reaching the customer level of satisfaction
- Increasing the competition
- Pressure from regulatory body

*There will be a situation of volatility because of insufficient money. This means there is no proper rotation of money in banking industry. There are no proper returns on investments and there is no profitability, there is also no return on equity as per the customers' expectations. In this kind of situation where banking industry should deal with stability as its main concern is with rotation of money as per my analysis.

*Customers should actively participate in deposit of money in the banks. If there is no proper money deposit in the banks then there will be no proper rotation of money. If the banks position is with not enough money then banks may not reach the customer level of satisfaction and it will be in a position of uncertainty. As per my analysis banks should certain in the times of uncertainty.

*Banks are also facing the challenges due to increasing competition due to technology. As there is a lack of technology adoption by banks there will be a complexity in reaching the customer level of satisfaction. So here with proper knowledge banks should adapt the technology.

*Due to the pressure of the regulatory body banks are in a position of ambiguity with regard to operating of monetary functions and operations of customers services. So here according to my analysis banks should intake clarity as medicine and with the help of that banks will withstand the pressure regulatory body.

Here banks should adopt sustainable financial development, so that sustainable financial development leads to the sustainable financial growth in banking sector.

SCOPE OF THE STUDY

My scope of the study is confined to

- Agricultural sector in Primary sector
- Textile industry in secondary sector.
- Banking industry in tertiary sector.

METHODOLOGY

The methodology of collection of data is through secondary resources like websites, books, journals etc. My research paper is conceptual in nature.

CONCLUSIONS OF THE STUDY

Sustainable financial development leads to

- Sustainable financial growth in primary sector
- Sustainable financial growth in secondary sector
- Sustainable financial growth in tertiary sector.

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PEER-TO-PEER LENDING USING BLOCKCHAIN**Vijaya Kittu Manda¹ and Satya Prakash Yamijala²**Doctoral Research Scholar¹, GIM, GITAM (Deemed to be University), VisakhapatnamApplication Designer², DXC Technologies Madhapur, Hyderabad

ABSTRACT

Peer-to-peer lending (P2P lending) have become a dominant alternative financing route for individuals and small businesses with little or poor credit history. These fintech products are strongly disrupting the way lending works and thereby challenging the dominance of formal banking and financial institutions. Disruption technology Blockchain, in its new avatar - Enterprise Blockchain or Blockchain 2.0, has some essential features such as smart contracts, public and private layers etc. that can optimize P2P lending process by making the entire process more seamless, cutting processing time, reducing or even eliminating intermediate financial intermediaries etc.

A Blockchain supported framework is proposed in this paper by exploring the use of Blockchain 2.0 features in the P2P lending context such as in the role of information flow, digital contracting, platform implementation and interface, risk management, institutionalization and regulation of P2P markets etc. While blockchain does not really reduce credit risk, it has the potential to dramatically improve turnaround time in loan processing, reduce operational risks thereby improving the efficiency of funding through decentralization, trusted records and better pricing (of interest rates) for the lenders.

Keywords: Blockchain, smart contract, lending, p2p lending, alternative lending

INTRODUCTION

Peer-to-peer lending (P2P lending) is an online collateral-free lending system for individual and businesses borrowers with little or no credit history from a matching one or more interested individual lenders. Being unsecured and collateral-free loans, the entire credit risk falls on lenders and hence p2p lending is riskier than traditional lending. Through online platforms, P2P lending companies facilitate placing of bids, credit profiling, offer matching, transfer of loan amount and recovery process. Because these services are offered online, the overheads, processing, maintenance and operating costs will be low compared to other traditional forms of lending. Thus, these platforms can offer credit at attractive interest rates and more quickly. P2P lending has experienced rapid growth in recent years challenging the dominance of banks and financial companies.

Being digital, P2P lending can cut geographies and can bring lenders and borrowers to the same digital platform. Because it is collateral-free, P2P lending can bring in large unbanked and uncredited population to the formal financial system and hence aids in rapid financial inclusion. The concept appears as a digital version of microfinancing, collectives or cooperatives. The lending platforms have evolved over time. While early day platforms are more of information dissemination and acted as credit listings services, modern platforms include features such as credit scoring and credit processing services by intermediaries as well.

Blockchain is a disruption technology that has gained interest in applications related to banking and financial services. This paper explores the possible extension of blockchain technology for the P2P lending segment.

OBJECTIVES OF THE STUDY

1. Factors and attributes affecting lender, borrowers and the P2P platform, particularly in the context of Indian marketplace are studied.
2. Features of Blockchain and how they can help in P2P lending are explored.

SIGNIFICANCE OF THE STUDY

This study is significant for the development of the P2P lending industry, particularly in developing markets such as in India. Existing platforms can consider various blockchain features that can help them in better resource utilization and access to extending their business globally.

DISCUSSION**a. History & Growth of P2P Lending**

A fairly recent phenomenon, alternative financing got attention with the startup and fintech boom of the early 2010s. Banks responded to the disruption challenge by embracing new technologies but could not gain because of one big reason - startups have flexible business models and less regulation while banking regulations are rigid and well regulated. Early P2P platforms involved lending within known friends' circle. Because of this,

trust factor is not a major criterion because members (mostly) knew each other and belong to the same social group. But with lending circle becoming bigger, trust might not be that strong. Added, loan ticket size too began to increase highlighting the importance of intermediaries and third parties coming into the equation. This obviously increased cost and time in the overall lending process.

The first peer-to-peer loans are underwritten in the United Kingdom in 2005. The concept soon moved to the United States and Korea (2006) and later to other countries such as China and Sweden (2007), Israel (2011), Australia and India (2012), Ireland (2013), Indonesia, Bulgaria and Canada (2016), Latvia and Brazil (2018) etc. Zopa (UK), Prosper (US), Smava (Germany), WeLab (Hong Kong), SocietyOne (Australia), Trustbuddy AB (Sweden), Linked Finance (Ireland) and Money Auction (Korea) are the first p2p lenders in their respective regions.

With a 51.5% CAGR growth globally, P2P lending is currently the fastest growing segment in the finance industry. Market estimates that it will reach US \$460,312 million by 2022. With US \$15.98 billion lending in loans (as of 31 Dec 2015), LendingClub is the world's largest P2P lending company and the first such company to get listed on stock exchanges. Upstart, Funding Circle, Prosper Marketplace, CircleBack Lending and Peerform are some leaders in the category.

b. Peer 2 peer Lending in India

Though introduced in 2012, much of p2p lending developments in India came after the Indian banking regulator Reserve Bank of India (RBI), vide a notification in September 2017, recognized P2P lending as a form of non-banking finance company (NBFC) and started issuing licenses to lending platforms. The Non-Banking Financial Company – Peer to Peer Lending Platform (Reserve Bank) Directions, 2017 notification dated October 4, 2017 is a master directions notification. It fairly dealt with the various aspects of p2p lending - eligibility criteria, registration process, scope of activities, prudential norms, operational guidelines, fund transfer mechanism, updates to credit information companies, transparency and disclosure requirements, fair practices code, grievance redressal, information technology framework, reporting requirements, supervision amongst others (RBI, 2017). Amongst key requirements to run a p2p lending platform include net owned fund of the company to be not less than Rs. 2 crores (to ensure skin-in-the game of the promoting company) and that the management and directors need to fulfil the 'Fit and Proper' criteria as laid out by RBI.

Licensed platforms can lend money from the lenders but cannot lend from their own books. RBI capped the maximum lending by a single lender to Rs. 10 lakhs to borrowers across all P2P platforms at any point of time. A similar Rs. 10 lakh borrowing limit is imposed on the borrower. The maximum amount a single investment is also capped at Rs. 50,000. The lending should compulsorily be through banking channels and the lending term should not exceed 36 months. While these limits are important considering the industry is in nascent stage, it is making venture capitalists unattractive to fund Indian fintech startups operating in this segment. In January 2019, RBI asked platforms to submit metrics and key information to access the health of the platforms. It is believed this reporting will be regularized and platforms would be asked to furnish once a quarter.

While there are over 30+ p2p lending players in India, only 11 have so far got registration from RBI (as of December 27, 2018) under the NBFC-P2P category. Popular Indian lending platforms include Faircent (May 2018), Finzy (July 2018), i2iFunding (Sep 2018), Peerlend, LiquiLoans, AnyTimeLoan, LenDenClub, Monexo, iLend, LoanBaba, CapZest, OML P2P (2018), Cashkumar (2018), Paisadukaan (2018) and RupeeCircle (2019), India Money Mart (2019). While licencing gives a sense of confidence to lenders, not all lending platforms are keen to opt for it. IndiaLends, for example, feels to stay away from the licensing because it has sufficient credit pipeline. The Digital Lenders Association of India (DLAI) was formed in November 2016 and has 50 members.

The size of the Indian p2p lending market is at Rs. 200 crores in 2018 and industry estimates it to cross Rs. 1000 - 1500 crores in 2019 and to reach US\$4 - 5 billion by 2023. One key reason for the development of p2p lending in India is because of the launch of digital stacks (Aadhar, eKYC and digital payments). Access to CIBIL data helped the platform in credit evaluation, analytics and reporting. Penetration is currently largely concentrated in Tier 1 cities and is in picking up in Tier 2 and Tier-3 cities. While most focus was on salaried class borrowers, attention is now going towards SME lending as well. Defaults or bad loans in Indian p2p lending are below 2% and hence are under control so far. Indian platforms are now gearing towards building a multi-tenanted infrastructure by migrating to blockchain that facilitates easy sharing of lending data so as to mitigate risk. Faircent made a US \$1 million commitment towards this.

Industry challenges include low financial literacy levels, a general fear of using digital products for safety reasons, lack of proper financial infrastructure (because of low PAN card penetration, low income-tax return filings, lack of awareness on credit scores), redundant KYC processes etc.

c. P2P Lending vs other forms

Crowdfunding is similar to P2P lending except that in the former, the expectation of the lender is not just the safe return of the loan but a reward (such as the first copy of the project work or a mention in the acknowledgement) or equity (a stake, and thereby right and future profits of the company or a project). While both P2P lending and crowdsourcing have become good alternative financing, individuals and small businesses would prefer P2P lending because they do not have the obligation to part sell ownership while repaying in affordable monthly repayments.

Microcredit differs from P2P lending in the sense that in the former, the target audience are illiterate masses who cannot do any documentation to get a loan. A variant of microcredit, called peer to peer lending microcredit, targeted for micro-entrepreneurs is in test implementation.

d. Blockchain

Blockchain's role in reducing cost, processing time and eliminating non-value adding intermediaries and thereby value addition to existing businesses models, particularly in banking and finance segments is well discussed (Vijaya Kittu & Aruna, 2018). After getting initial acceptance from core banking and financial areas, the technology is now making inroads into secondary functional areas such as the asset management industry and mutual funds (Vijaya Kittu & Prasada Rao, 2018).

Decentralization eliminates dependency on a single location for data storage and retrieval. Centralized authority is removed with consensus mechanism. Immutability makes data cryptographically encrypted and hash tag can act as data identifier. This will make the data safe and tamper proof and hence puts fraud and corruption under control. Because transactional data is distributed across the network, other computers can act as data validators and hence transparency and accountability are automatically achieved in the system. The elimination of processes (by removing non-value adding intermediaries) or their simplification (by doing KYC only once) can help reduce processing cost in the financial services compared to the conventional system. Blockchain has proved immense cost cutting benefits in both inter-bank and intra-bank as per several use-cases already available. Enterprise blockchain had dramatic speed optimizations compared to the original blockchain implementations and is now reaching industry grade latency. Permissioning and layering in the form of public and private blockchains keeps data access allowed only to parties having permission. Enterprise blockchain provides all the three essentials - high performance, high resilience and privacy and hence a suitable technology for financial services.

e. Blockchain advantages for P2P

A blockchain solution for global peer-to-peer lending is on the horizon. P2P lenders using blockchain can help reduce delays, make quick approvals, eliminate the need for middlemen and bring transparency. The speed of backoffice processing and settlement is one of the major reasons why financial institutions are interested in blockchain and the same applies for p2p lending as well. Increased efficiency and cost reduction are the next biggest bets. Due diligence - a key but time-consuming aspect of lending can be speeded up.

While traditional blockchain implementations are public or private, most enterprise blockchains are consortium blockchains with part public and part private, semi-decentralized and permissioned. Smart contracts and digital signing help establish a contract between the parties and helps in legal enforcement.

Once a loan is issued, tracing the utilization of funds (to a certain extent) as well as aiding in recovery of loans that turned bad are relatively easier on a blockchain. This would be necessary in countries with low penetration of debt recovery agencies and when p2p lending loans are not insured (Gonzalez, 2018).

Cryptocurrencies are themselves blockchain implementations and can straight away fit into the P2P lending architecture. Thus, fund flow in the lending system will be faster and can happen without any bank processing overheads or delays. Further, the lending platform can be scaled globally with both lenders and borrowers placing their bids digitally while physically present in different geographies. Further, the role and involvement of central bankers would be limited in such implementations. This exactly irks Central banks and Governments and they have mixed acceptance about cryptocurrencies as a legal tender. While some approved it totally (Australia, Japan etc.), some rejected outright (Bolivia etc.) while most others are dealing with it on a case-to-case basis (Canada, New Zealand etc.) (Thomson Reuters, 2017). An extension of cryptocurrency funding for the p2p lending can be in the form of wallet money on the lines of PayPal and PayTM which many wallet service providers are exploring.

Enforcement of regulatory rules will become easy on blockchain. In the Indian context, there is no check in regard to the lending limit enforcements (as to lenders limited to Rs. 10 lakhs across platforms) because there is

no such network or checks within the lenders themselves. Compliance and data reporting to the regulator can be easy and will be available to the regulator as and when needed. This will move the platform to data-pull mode instead of data-push mode.

A robust blockchain implementation could eliminate the need of any third-party credit rating checks or “proprietary ratings” as the blockchain system itself can keep a track and maintain credit scores of the borrowers. Some platforms, such as Libra Credit have built a credit scoring system that is universally applicable. The lender also allows crypto-to-fiat, crypto-to-stablecoin and crypto-to-crypto lending thereby giving a high degree of flexibility to the borrowers.

Banks are not remaining as bystanders looking at P2P lending disrupting them. Collateral-based blockchain powered lending applications for liquid assets are implemented by ING and Credit Suisse. However, their fight is short amidst industry headwinds. Secure Automated Lending Technology (SALT) Lending, ETHLend, Ripio Credit Network, Lendit, Jibrel Network, HashLend are the some popular p2p lending platforms built on blockchain and smart contracts.

LITERATURE STUDY

A summary on early P2P lending is well documented by (Bachmann, et al., 2011). Trustworthiness aspects such as attractiveness and loan amount (Jin, Shang, & Ma, 2018) are thoroughly covered. (Duarte, Siegel, & Young, 2012)’s empirical evidence showed that borrowers who appear trustworthy indeed have better credit scores and lower default rates. However, lenders do not lower their interest rates enough to fully account for the trustworthiness. Listing information such as interest rate, repayment method and borrow reliability often account to one-third of lending documentation and are important to build trust to the lender. Loan applicant characteristics such as employment status and social interaction decide success of a P2P loan application (Park). The language and persuasion abilities displayed in the listing speaks a lot and influence lenders (Larrimore, Jiang, Larrimore, Markowitz, & Gorski, 2011). The trustworthiness of the borrower is more important than the intermediary (Zhang, Tang, Lu, & Dong, 2014). While US studies such as (Lin, Viswanathan, & Prabhala, 2009) say social capital (SC) has an impact of lender’s trust in the borrower, other works, such as in the Chinese context contradicted (Zhang, Tang, Lu, & Dong, 2014).

Internet technologies such as Web 2.0 and digitization have shifted the lending market place to online platforms and have dramatically cut cost and time. Strong regulations give confidence to market participants. Absence or weak regulations will create uncertainty, keep the market in infancy, slows down financial innovations and not encourage market players to step-in (Fong, 2015). Would some countries have explicitly codified regulations (such as India, New Zealand and the US), most others have existing legislation that can be applied on P2P lending. (Philippon) discussed about regulation of Fintech’s, (Fong, 2015) on Hong Kong, (Adriana & Dhewantoa, 2018) on Indonesia (comparing with India and China) and (Stern, Mäkinen, & Qian, 2017) on China.

Recently awarded patents by the United States Patents and Trademark Office on blockchain include registering public documents (US 2019 / 0026496 A1), digital assets and token based physical assets (US 2019 / 0028276 A1), distributed ledger-based peer-to-peer lending (US 2019 / 0026730 A1) amongst others.

There is little or no work on P2P lending in the Indian context. Further, the use of blockchain for P2P lending too is hardly covered. Hence, there is a clear literature gap.

RESEARCH METHODOLOGY

This study uses Descriptive research to gather preliminary information, *observe* the growth and development of the p2p lending and blockchain technologies, *record* the coming together of the two and *describe* the advantages from such an implementation.

DATA COLLECTION

Only secondary data sources were used for collecting information necessary for this study. The data is collected from several journals, research papers and websites.

IMPLICATIONS

This study will be of help to p2p lenders, technology solution providers and regulators in further strengthening their systems and processes.

FINDINGS

1. P2P lending is in nascent stage in various countries and the regulatory strength is not that strong.
2. Regulatory compliance is hardly checked.

3. The instances of defaults are low in new markets but are very high in matured markets such as in China.
4. Lenders who are taking high degree of risk with p2p lending are getting rewarded with equity-type exorbitant returns in most cases. However, as marketplace matures, the returns might not look that attractive.
5. Enterprise Blockchain gives performance, accommodates all stakeholders into the framework and can help foster the industry.

SCOPE FOR FURTHER STUDY

1. Country-specific regulatory aspects as well as comparison studies on p2p lending can be done
2. The concept of alternative lending further evolved Lending-as-a-Service consortiums and into other models (consumer, small businesses etc.). The US recently even got a registered alternative lending fund. This dimension can further be explored.
3. (Aziz, Dowling, Hammami, & Piepenbrink, 2019) discussed about machine learning (ML) applications in finance, particularly in forecasting and modelling. (Destine, Lerner, Mehmetaj, & Shah, 2016) used ML to forecast probability of full payment or default. These papers showed other disruption technologies can help in various aspects of p2p lending.

CONCLUSION

This study adds up to the existing literature on p2p lending and thereby enriches the existing body of knowledge. P2P lending is a boon to borrowers with broken credit scores and to lenders who take higher degree of risk for higher returns. While the default instance is few in developing markets, they are high in matured markets. With its improved processing performance, smart contracting and permissioning, Enterprise blockchain is of immense use for P2P lending platforms. Cost efficiencies, reducing time for onboard new members, issue and recovery of loan and compliance can all be done using this technology. Hence, blockchain can help in the development of the p2p lending industry.

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COMPETENCY FRAMEWORK FOR EFFECTIVE RISK MANAGEMENT IN SMES

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ABSTRACT

SMEs are the primary drivers in the growth of the country's economy due their major contribution to GDP, employment creation, growth of per capita income etc. The SMEs sector is also growing in a faster mode due to innovation, government schemes and also due to huge youth population in India. Schemes like Make in India have boosted the SME sector in the country. This growth should also ensure sustainability in long run, but many SMEs fail to sustain in long run due to uncertainty and different risks involved in the business. The paper focuses on the Risk Management Process suggested by ISO31000 for SMEs and list the competencies needed to manage the risk effectively.

Keywords: Risk Management, SMEs, ISO 31000, Competencies.

INTRODUCTION

SME'S are the major drivers in the economy and play a very important role in economic development of the country. SMEs are the backbone of the Indian economy. India being a population intensive country the SMEs creates a huge employment opportunity witnessing 40% employability in India. SMEs also contribute 45% to Indian manufacturing output and 40% of India's total export. This promising growth of SMEs also alerts the sector for need for effective Risk Management. Managing risk is the need of hour and needs a strategic approach to manage risk, but SMEs lack the ability to manage risk due to varied reasons. This article highlights the importance of Risk management using ISO 31000 standard. Introduced in 2009, the ISO 31000 standard is intended to help organizations to manage in a systematic and comprehensive manner diverse types of risk by offering a universal framework 'to assist the organization to integrate risk management into its overall management system' (ISO, 2009a, p. 9).

RISK IN SMES**The Definition of "Risk"**

Risk is understood as the uncertainty in the course of action I organizations. Risk is involved in every aspect of life and into any type of business small or big. However risk can be analyzed through experience and competence. Risk types, following the classification of the Casualty Actuarial Society (2003):

- a. "Hazard risks", comprising fire and other property damages, windstorm and other natural perils, theft and other crimes, personal injury, business interruption, disease and disability (including work-related injuries and diseases), and liability claims.
- b. "Financial risks", comprising price (e.g., asset value, interest rate, foreign exchange, commodity), liquidity (e.g., cash flow, call risk, opportunity cost), credit (e.g., default, downgrade), inflation/purchasing power, and hedging/basis risk.
- c. "Operational risks", comprising business operations (e.g., human resources, product development, capacity, efficiency, product/service failure, channel management, supply chain management, and business cyclicality), empowerment (e.g., leadership and change readiness), information technology (e.g., relevance and availability), information/business reporting (e.g., budgeting and planning, accounting information, pension fund, investment evaluation, and taxation).
- d. "Strategic risks", comprising damage to reputation (e.g., trademark/brand erosion, fraud, and unfavorable publicity), competition, customer wants, demographic and social/cultural trends, technological innovation, capital availability, and regulatory and political trends

NEED OF THE STUDY

Global financial crisis has resulted in major imbalances in global economy and the global economy struggled to cope with the crisis; comparatively Indian GDP continued to grow at a faster pace. According to IMF India is projected to grow at 7.8% in this fiscal year and undoubtedly role of SMEs is commendable in this regard. SMEs directly contribute to increase in GDP of the nation but the sustainability and survival of the SMEs is facing a challenge due to different types of risk the SMEs confront. The need for Risk management process and the competencies necessary to manage these risks is the need of the hour. This paper focuses on the ISO 31000 standard for Risk Management in SMEs and the competency Framework to follow the standard.

RESEARCH OBJECTIVES

1. To understand risk management process followed in SMEs
2. To understand the relevancy of ISO 31000 in managing risk in SMEs
3. To analyze the importance of risk management in SMEs
4. To suggest a competency framework to manage risk in SMEs

LITERATURE REVIEW

1. Nusaibah binti Mansor (2017) conducted a comparative study between Japan and Malaysian SMEs on implication and effect of risk management. The study concluded that the impact of ISO 31000:2009 implemented in one of the developed countries provided useful insights for SMEs in managing and facilitating decision making.
2. ChiaroVerbano & Karen Venturini(2012) in their study have done an intensive literature survey on managing risk in SMEs from 1999 to 2009. Their analysis helped them to device intensive characteristics from their scientific studies highlighting gaps and guiding for future research.
3. M Fera, R Macchiaroli(2010) have proposed a new risk assessment method. A new model with a combination of quantitative and qualitative methods is proposed which could be implemented in SMEs. The author feels the existing models are not apt and difficult to directly apply in SMEs. The focus is on safety at work by suggesting the risk assessment model.
4. Mohd Nishat Faisal , D K Banwet and Ravi Shankar(2006) conducted a study with respect to research management in supply chain of SMEs. An ISM model is being applied to the present hierarchy based model and contextual relationships among these barriers are studied. The study helped in identifying the barriers which are strategically important in managing supply chain risk in SMEs.
5. VN Leopoulous, Kakirytopoulos, Malandrakis(2006) in their research have attempted to present basic risk management tools by focusing on their key features. These tools which have explicit quantitative analysis capability are suggested and it includes 16 software tools ranked in terms of features available. One of the tools is being explained by using a case study. The study concludes that the use of such tools results in cost effectiveness

LIMITATION OF THE STUDY

The study is narrowed down to SMEs in specific and the study is conceptual and not an empirical study. There is a tremendous scope for studies on Risk Management but the study is not accompanied by a substantial body of studies in the literature. The Risk management for SMEs is still understudied.

ISO 31000: A CLASSICAL MODEL FOR RISK MANAGEMNT IN SMEs

One of the main objectives set by the ISO 31000 standard is to continually improve risk management in organizations based on a generic model that is intended to adapt to a wide variety of (Leitch, 2010 ; Purdy, 2010) . International organization for standardization has codified ISO 31000 for risk Management which provides the principles and generic guidelines on Risk management. ISO 31000 seeks to provide a universally recognized paradigm for practitioners and companies employing risk management processes to replace the myriad of existing standards, methodologies and paradigms that differed between industries, subject matters and regions.

ISO 31000 Risk Management Principles

The sustainability of any organisation is entirely dependent on the value system of the organization and ISO 31000 states the purpose of risk management is creation and protection of value. ISO 31000 provides set of principles which help in effective risk management. There are eight principles presented in standard which are:

1. Framework and processes should be customised and proportionate.
2. Appropriate and timely involvement of stakeholders is necessary.
3. Structured and comprehensive approach is required.
4. Risk management is an integral part of all organisational activities.
5. Risk management anticipates, detects, acknowledges and responds to changes.
6. Risk management explicitly considers any limitations of available information.

7. Human and cultural factors influence all aspects of risk management.
8. Risk management is continually improved through learning and experience.

ISO 31000 FRAMEWORK

The guidelines of ISO 31000 are focused on leadership and commitment by key personnel of organization who are competent enough in decision making to manage risk. ISO 31000 provides a frame work of activities in organization which supports in Risk Management. The framework written by ISO 31000 also gives details on the extent of commitment necessary from the personnel in organization. The details of the frame work is as below

RISK MANAGEMENT ARCHITECTURE

- Committee structure and terms of reference – includes risk management committee structure and should involve key decision makers in the organization.
- Roles and responsibilities- clarity on roles and responsibilities in areas of Risk Management should be clearly explained.
- Internal reporting requirements- involved necessary reporting of elements.
- External reporting controls- external reporting to stakeholders
- Risk management assurance arrangements.

RISK MANAGEMENT STRATEGY

- Risk management philosophy- ultimate reason behind Risk management.
- Arrangements for embedding risk management
- Risk appetite and attitude to risk: this explains the key decision maker's perception on risk management.
- Benchmark tests for significance- selection of best possible tools and techniques for Risk Management.
- Specific risk statements/policies
- Risk assessment techniques
- Risk priorities for the present year

RISK MANAGEMENT PROTOCOLS

- Tools and techniques for Risk Management.
- Risk classification system- involves risk mitigation prioritization
- Risk assessment procedures
- Risk control rules and procedures
- Responding to incidents, issues and events
- Documentation and record keeping
- Training and communications
- Audit procedures and protocols
- Reporting/disclosures/certification

ISO 31000 PROCESS

The risk management process starts with assessing the risk, and Risk identification and analysis involves identifying the cause and source of risk and that which is stopping the organization in achieving the objective, studying the probabilities and consequences given the existing controls, to identify level of residual risk. After Risk identification and the risks are evaluated by comparing the risk analysis with risk criteria whether the risk is tolerable and to what extent. The final step is Risk treatment by changing the magnitude and procedures of the actions followed by identifying the positives as well as negatives and see how the overall benefit is achieved. The process also focuses on communication and consultation of risk management process with the stakeholders to check if it is focusing on right elements

PROPOSED COMPETENCY FRAMEWORK FOR EFFECTIVE RISK MANAGEMENT IN SMEs

The core competency for a risk management in SMEs explains capability of the Risk Manager to effectively implement the ISO 31000 framework to mitigate the risk in the organization. The study focuses on identifying the core competencies needed to successfully manage risk. The competencies are identified according to the Risk management process in ISO 31000 stages.

COMPETENCIES TO ESTABLISH THE CONTEXT

- Ability to understand the organizational context by analyzing internal ethos of organization.
- Assessing uncertainty
- Analyze resources and forces leading to occurrence of risk
- Knowledge management
- Knowledge on standard reporting

COMPETENCIES TO RISK ASSESSMENT PROCESS

- Identification of risk minimizing elements and entities
- Knowledge on cost estimation of risk
- Containment
- Recovery Management
- Communication of Information to stakeholders
- Crisis Management
- Change management
- People management
- Identification of Risk management tools and techniques

COMPETENCIES TO RISK EVALUATION

- Prioritization of risk mitigation
- Risk strategy Management by aligning it with organizational objectives.
- Risk strategy evaluation
- Identify actions needed to address risks
- Implementing risk control techniques

DEMONSTRATING COMPETENCIES

Competence can be demonstrated through a combination of experience and knowledge. The certified risk management professional qualification is one of the ways to effectively manage risk.

- International Diploma in Risk Management (IRM - Institute of Risk Management)
- Financial Risk Manager (GARP - Global Association of Risk Professionals)

OTHER COMPETENCIES NEEDED FOR RISK MANAGEMENT

Communication skills: to communicate the importance of risk management to the stakeholders

Integrity: displaying objectivity and independence in their work and sound ethical moral and professional conduct.

Creativity and adaptability: to view the situation in all possible angles

Situational analysis: presence of mind to effectively analyse the situation.

Cultural and social awareness: to understand the organization and people working in the organization

FURTHER RESEARCH SCOPE

The study is based on secondary data and literature survey and is restricted to SMEs further the study can be extended to sector specific SMEs. The competencies mentioned above can be validated by conducting the survey in consultation with the industry experts. The risk management practices can be related to lifecycle stages in SMEs

CONCLUSION

The study aimed at understanding the risk management process at SMEs and also studied the relevance of ISO31000 standard for Risk Management in SMEs. The process of Risk Management is analyzed and the necessary competencies are identified to enable the effective implementation of Risk management process. Keizer et al.'s (2002) defines Risk process as: "Risk processes do not require a strategy of risk avoidance but an early diagnosis and management". As mentioned in the definition the risk diagnosis and management plays a pivotal role in SMEs and this is possible only by competent risk managers in SMEs. The paper suggested the competency framework for effective risk management. Considering the role of SMEs in Indian economic development and their significant contribution in human capital and value added creation it becomes very crucial for SMEs to establish a systematic Research management process. The paper explains the strategic approach in implementing research management process by explain the ISO 31000 process for Risk Management and suggests the necessary competencies for implementing the same in SMEs.

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ROLE OF STRATEGIC LEADER IN THE VUCA WORLD

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ABSTRACT

In the current era of Globalization , Digital Transformation ,Mergers and Acquisition there is a continuous need for Innovation and creative leadership. The Strategic leader has to shift from traditional ways of managerial decision making to more innovative ways of decision making to overcome the Volatility, Uncertainty, Complexity and Ambiguity (VUCA) aspects of the organization. This resonates a need to align the strategies of the organizations and the VUCA aspects of the organization. In this scenario Leadership becomes crucial and strategic thinking becomes imperative. It throws a challenge to the strategic leader to develop a strategy for steady leadership in an unstable world of Business. Hence this Paper focuses on the role of Strategic leadership, the challenges the organization faces and how these challenges can be transformed into opportunities in today's VUCA world .

Keywords: Strategic Leadership, VUCA, Innovation , Service sector.

INTRODUCTION

Change is inevitable, the pace of change happening in the modern times is far beyond the imagination of even the change makers, leave alone the common man. Changes in technology, and the processes have brought about far-reaching changes in the lives of the people and their environment. These changes have created not an abnormal but an uncertain and unstable world posing many challenges to the senior level managers of an business entity. These strategic leaders who operate in the VUCA environment need to strengthen their leadership skills for strategy planning. The dynamic and fast changing nature of our world today is best described by VUCA. VUCA stands for Volatility, Uncertainty, Complexity and Ambiguity prevailing to characterize the nature of difficult conditions and situations in decision making. VUCA is first derived from military education and was introduced by US army college for war to describe the results of cold war. The VUCA concept has since then been adopted throughout businesses, industries and various sectors to guide leadership and strategy planning. It gained importance in early 2000 paving the way for strategic leadership skills required in operating in the VUCA world.

LITERATURE REVIEW

To meet the challenges of a complex world, strategic planners need to understand the differences between the four elements of VUCA - volatility, uncertainty, complexity, and ambiguity. There is an important need to identifying, getting ready for, and responding to events in each category of the VUCA world. (Nathan Bennett &G. James Lemoine 2014) .The critical success factors of responsible leaders living in a VUCA world are based on sound business principles, a firm's ability to respond speedily, strong collaborative networks, innovation and ethical practices. These are aligned with a responsible leadership style, which is a combination of transformational and authentic leadership (Anita Sarkar 2016). During a crisis, leaders must draw on a specific set of competencies that will not only drive the crisis toward resolution, but also do so in a way that preserves or enhances the firm's functional capabilities, financial and other resources, employee morale and commitment. (Wooten, James 2008). The several steps business leaders can take to deal in a VUCA world is hire agile managers, develop existing leaders to be agile leaders, foster an organizational culture that rewards prime behaviors and retain agile employees. (Kirk Lawrence 2014)

OBJECTIVES OF THE STUDY

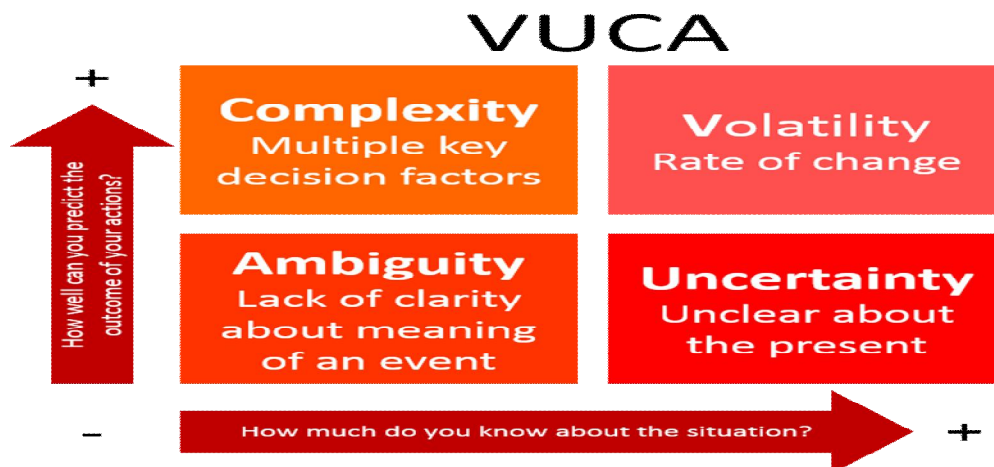
- To study the challenges faced by the strategic Leader in VUCA world and the strategies adopted to transform these challenges into opportunities to lead in the VUCA world.

METHODOLOGY OF THE STUDY

The present paper attempts to understand the critical competencies required by strategic leaders to counter the complexities and ambiguity of the VUCA world. The fast pace of economic developments the world around, the advancements in technology, globalization and several other factors have led to Volatility, Uncertainty, Complexity, Ambiguity in the operations of the business activities. This paper presents an empirical study of the understanding of the strategic leaders dilemma in combating the vagaries of the VUCA world but finally triumph with the age old values- led and principle – driven, the true vision of an business enterprise. The study has extensively gathered information from various online resources, research papers and from several other online published articles.

Understanding VUCA

VUCA	LEADERSHIP IN A VUCA WORLD
Volatility = V	V = Vision
Uncertainty = U	U = Understanding
Complexity = C	C = Clarity
Ambiguity = A	A = Agility



VOLATILITY: The challenge is unexpected or unstable and may be of unknown duration, but it is not hard to understand; knowledge about it is often accessible.

UNCERTAINTY: Despite lack of other information, the event basic cause and effect are known.

COMPLEXITY: The situation has many interconnected parts and variables. Some information is on hand or can be predicted, but the volume or nature of it can be vast to process.

AMBIGUITY: Causal relationships are completely unclear. No precedents exist;

FEATURES OF STRATEGIC LEADERS IN VUCA WORLD:

Strategic leaders work in an ambiguous environment and these environmental factors are influenced by occasions and organizations. The main objective of strategic leadership is strategic productivity, forecasting the organizations requirements, motivating employees in idea generation and decision making etc. To facilitate this strategic leaders must possess competencies to foresee and comprehend the work environment:

Keeping themselves updated- competent leaders keep themselves updated about what is happening within their organization.

Should Have wider perspective- Strategic leaders should have the ability to go beyond the borders and think out of the box .

Compassion- Strategic leaders must understand the views of their subordinates, and make decisions after considering them.

Self-control- Strategic leaders must have the potential to manage their moods and emotions in case of ambiguity of situation

Self-awareness- Leaders should be aware of ins and outs of situations and the complexity involved.

Readiness- Leaders should be willing to change as the situation demands .

Articulacy- Strong leaders should articulate enough to communicate the vision of the organization and drive everyone towards the attainment of that vision.

Essentials of a strategic leaders in VUCA world:

Set up incremental milestones and develop consistent messaging and clear direction, particularly when goals and priorities keep shifting.

Should not lose sight of the big picture by trying to solve all challenges at hand

Must respond to rapidly unfolding scenarios while also retaining a clear vision over which judgments should be made

Develop processes and concepts to test new ideas and challenges that exist.

Should always stay open to new opportunities without losing sight of the longer-term goals. ,,

Should be able to encourage networks, develop interdisciplinary, collaborative teams and should be open to communication among employees.

Strategic leaders should develop new strategic-thinking mindsets among employees.

Major Challenges turned opportunities of Strategic leaders in VUCA world:

Challenges	Strategies adopted in transforming these Challenges into opportunities
Leadership style	Being a visionary leader and developing agility of resilience.
Digitization	Diversifying and promoting efficiency in strategic planning by application of Big Data Analytics
Sustainability	Building a responding and a proactive culture of decision making by including values of integrity, trust and empowerment
Lack of future leadership skills	Building cognitive readiness to the situation

STRATEGIC LEADERSHIP SKILLS IN MANAGING THE ORGANIZATION IN A VUCA WORLD:

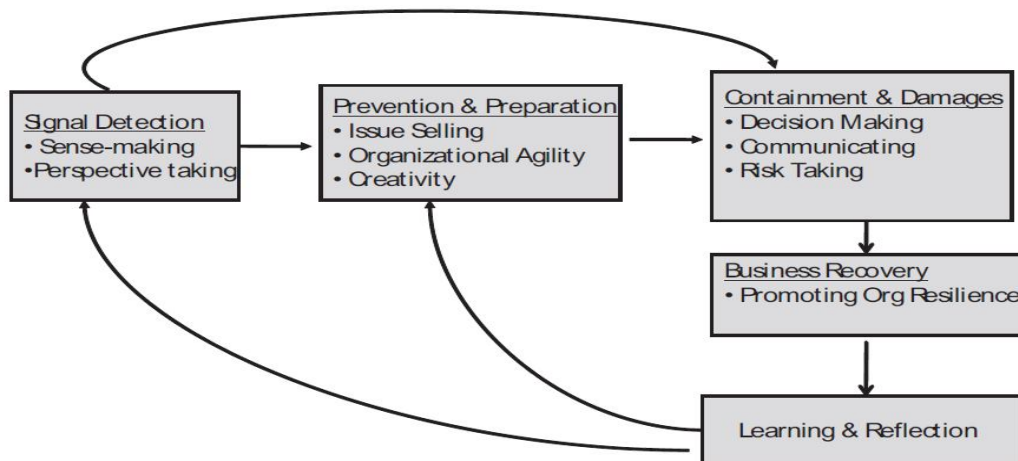
Leadership can be conceptualized as a combined phenomenon where different individuals contribute to the organization (Pettigrew & Whipp, 1991; Spreitzer & Quinn, 2001). Leadership competencies, in turn, refer to the knowledge, skills, or abilities that facilitate the ability to perform a task (Boyatzis, 1982; Ulrich, Zenger, & Smallwood, 1999). It is well accepted that leadership is viewed as a active process in which roles evolve over time, and leadership influence can extend beyond the focal organization limits (Denis, Lamothe, & Langley, 2001). In a catastrophic situation, leadership is collective and dynamic, and it requires perception and cognitive skills by leaders in order for them to establish appropriate courses of action (Walsh, 1995; Weick, 1988). Therefore, we might expect crisis leadership competencies to include activities such as decision making, communication, creating organizational capabilities, sustaining an effective organizational culture, managing multiple constituencies, and developing human capital (Bolman & Deal, 1997; Schein, 1992).

• TO GUIDE LEADERSHIP AND STRATEGY PLANNING

Agility feature in leaders have to be imbibed by shifting from tactical, problems solving to more visionary, innovative and bring right human talent to make the things happen, who work as a catalyst in strategic planning and consistently strive for building agile competencies by scanning the environment and anticipating the future, explore multiple views when dealing with complex problems, envision himself by aligning his behavior with values.

• CRISIS MANAGEMENT AND LEADERSHIP COMPETENCIES.

Most executives focus on communication and public relations as a strategy to deal with crisis management and neglect the development of leadership competencies associated with the crisis. But indeed it is the requirement of every organization to develop the competencies exhibited by the leaders during each phase of crisis signal detection, preparation and prevention, damage control and containment, business recovery, and reflection and learning.



Source: Linking Crisis Management and Leadership Competencies: The Role of Human Resource Development
Lynn Perry Wooten Erika Hayes James

- PESTLE analysis of external environment

PESTLE analysis of VUCA world deals with macro environmental factors like Political, Economical, Social, Technological, legal Environment of the organization in which it operates. This analysis assists in understanding various threats faced by the organization.

TABLE OF ANALYSIS OF VARIOUS THREATS FACED BY ORGANISATION

Macro environment	Factors of Concern for decision making by strategic leaders in VUCA world	Necessity for Strategic leaders
Political Factors	Govt. Resource allocation and their Changing policies, Importance of local governments in Leadership & Managing People	To deal with the ambiguity, volatility, uncertainty and complexities posed by the external environment of the business the strategic leaders must develop cognitive readiness, proactive nature, properly allocate scarce resources to preserve and enhance organizational performance for answering the threats Imposed by VUCA world of Business.
Economic Factors	Inflation rate , Skill level of workforce, liberalization of trade policy,	
Social Factors	Income inequalities, Demographic constitution , Migration, Literacy Rate, Norms of the Society	
Technological Factors	Research and development investment, Developments and dissemination of technology , Genx technologies	
Environmental factors	Waste management , Customer awareness, sustainable technologies, adverse climatic changes	
Legal Factors	Environment Laws, Health norms and safety norms, Data/cyber protection laws, Laws relating to protection of intellectual property, patents, copyrights, and company laws	

CONCLUSION

However, winning in a VUCA world is not just understanding the challenges and opportunities. It is also about the new kind of leadership, that is values-led and purpose-driven. Strategic leaders should redefine the role of business in society. As a business leader, it is about having a true north, the true goal of the business – the internal compass with non-negotiables, it is governed by conscience, honesty and brotherhood, most importantly, it is about sticking to them in good times and in adversity. VUCA world is but much the same values - values of integrity, responsibility, respect and a pioneering spirit, these are nonnegotiable. Being values-led is about the foundation that underpins the Company. Being purpose-driven is about the common objective that is larger than the Company itself. This common purpose should remain largely the same and it should unite all employees across the company, no matter which part of the world they work, but working towards a common goal.

Companies need to invest in leadership development and building a pipeline of values-led and purpose-driven leaders to help entities navigate through the VUCA world.

The two main ideologies, i.e. to be values-led and to be purpose-driven, are vital ingredients for leadership in this new world. These help an entity to navigate the VUCA world with ease for a sustainable living while doubling the size of the business. The embodied values and purpose of an business allows strategic leaders to face VUCA challenges with responsibility and commitment

We are clearly living in a new reality characterised by Volatility, Uncertainty, Complexity and Ambiguity, and this new world is here to stay. For businesses to succeed in the future, leaders need to redefine the rightful role of business in society by pursuing responsible growth.

To conclude strategic leaders should combine strategic foresight with agility; leaders should put consumers at the heart of the business; leaders should possess the ability to think local and act global; leaders should invest in building commitment in the organisation and developing others. Most important, leaders should be guided by a shared set of values and sense of purpose to overcome the challenges and seize the opportunities to win in this VUCA world.

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OFFER SIZE AS A PROXY FOR EX-ANTE UNCERTAINTY: EVIDENCE FROM INDIAN INITIAL PUBLIC OFFERINGS

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ABSTRACT

IPOs have interested financial economists for about five decades now. There is an overwhelming international as well as Indian evidence of initial underpricing (also called listing gains). It is measured as the difference between offer/issue price and first day closing price of the stock. The focus of this study is on the relationship between underpricing and ex-ante uncertainty. The study uses a dataset of latest period from 2014 to 2018. Offer size is used as a proxy for ex-ante uncertainty following the pattern of Beatty and Ritter (1986). The results indicate an average underpricing of 12.61% for the period of the study. The findings are indicative of statistically insignificant relationship between offer size and underpricing.

Keywords: IPOs, Underpricing, Ex-ante Uncertainty, Offer Size.

INTRODUCTION

The going public decision is a significant milestone in any body corporate, especially young. The decision of turning public provides opportunities to the company for expansion and growth using substantial funds that it may raise during the process. The shares issued during this event are then listed on the stock exchange and this provides avenues for trading in shares and subsequently an exit route through selling. There are many attractions of having shares listed on a stock exchange, including raising additional equity finance through a follow on public offering and the opportunity for promoters to create an exit route for themselves. Nevertheless, going public has its pitfalls also in the form of greater requirement for transparency and disclosure of its accounting and other information and greater accountability to a large group of investors. The process may also lead to dilution in control of existing owners. The first sale of a company's share to the general public is called *Initial Public Offerings*. IPO is the preferred route for most companies that turn public.

IPO Underpricing

There is international as well as Indian evidence of *initial underpricing (also called listing gains)*. It is defined as the difference between offer price and listing day closing price of the share. It is evident that the underpricing is costly to the company as it signifies that the company sells its share at a much lower price than what it is valued at immediately after listing. This leaves a lot of money on the table (defined as the difference between the value of company's shares received through IPO and the value of the same on the close of the first day of listing) and in the process company loses money. In short run, it is a benefit to the investors. However, there is international empirical evidence of long run underperformance of IPOs also. Academician and practitioners of finance view these phenomena as anomalies and are puzzled by them as in an efficient market such anomalies should not exist. Most of the empirical literature on IPOs is concentrated on the above anomalies, mainly short run underpricing, as researchers have not been able to find any satisfactory answer to the puzzle of short run underpricing.

Underpricing has been a regular phenomenon worldwide and this has led to development of vast literature on the topic resulting in many theoretical models. These models have been tested with data over the course of last few decades with mixed results.

REVIEW OF LITERATURE

The origin of the puzzle of underpricing can be traced back to Stoll and Curley (1970), Logue (1973) and Ibbotson (1975) who were the first to report listing gains in IPO. Since Ibbotson and Jaffe (1975) documented the phenomenon of underpricing, it has been one of the greatest puzzles in the literature of finance. No single theory, however, has been able to give an exhaustive explanation and consequently various approaches have developed.

THEORIES OF UNDERPRICING

The resultant theories of underpricing can be grouped under four broad categories which are listed below (Ljungqvist, 2007):

A. Models based on Information Asymmetry

B. Explanations Related to Institutions.

C. Ownership and Control

D. Explanations Related to Investor Behaviour

A. MODELS BASED ON INFORMATION ASYMMETRY

There are three key parties in an IPO event- the issuing firm, the merchant banker managing the issue and the investors. According to this model one of these parties may have more information than the others. The most significant contributor on this category is Rock (1986) who argues that some investors may be better informed than the others and can avoid investing in an overpriced IPO. This leads to an experience of winner's curse, similar to auctions, by the uninformed investors. The underpricing is a deliberate attempt on the part of the issuer to reduce the winner's curse of uninformed investors.

B. EXPLANATIONS RELATED TO INSTITUTIONS

This set of explanations focus on the possibility of lawsuit by the investors in the event of an overpriced IPO indicating that companies deliberately underprice their IPOs in order to avoid a case being filed against them for the loss caused to the investors in case of an overpriced IPO. The works of Tinic (1988) and Hughes and Thakor (1992) point to the abovementioned phenomenon.

C. OWNERSHIP AND CONTROL

This model tries to explain the puzzle of underpricing within the framework of the agency problem propounded by Jensen and Meckling (1976). Brennan and Franks (1997) contend that managers may allocate shares strategically, by using underpricing, for their personal benefits.

Stoughton and Zechner (1998), however, argue that allotting shares strategically to a big external investor may be advantageous for better monitoring and control. Underpricing may be used as an incentive in such a scenario.

D. Explanations Related to Investor Behaviour

With the advent of behavioural finance, behavioural explanations of underpricing have also gained credence. Behavioural theories point to the presence of either an irrational investor leading to an unrealistically high bid for the price of IPO shares after listing or the issuers may have some biases of their own leading to underpricing.

The works of Welch (1992) regarding formation of informational cascades, Ljungqvist *et al.* (2006) who talked about the presence of sentiment investors, and Loughran and Ritter (2002) who contend that bias of the issuers rather than investors lead to underpricing, are worth noting in this category.

EVIDENCE OF UNDERPRICING IN INDIA

Narsimhan and Raman (1995) evaluated the performance of 103 IPOs, Barnal and Obaidullah (1998) examined 433 IPOs and found evidence of high underpricing.

Shah (1995) studied 2056 IPOs from the period January, 1991 to April, 1995 and reports that underpricing on an average was 105.6 % above the offer price.

Krishnamurti and Kumar (2002) analyzed 386 IPOs form 1992-1994 period and reported that issues with smaller offer price are more underpriced.

Pandey (2005) examined the effect of allocation mechanism on underpricing. Using a sample of 84 IPOs (20 book-built and 64 fixed price from the period 1999-2000), he concludes that underpricing was lower for the book built issues in comparison to the fixed price offer. His study points to the reduction in underpricing on account of lower information asymmetry in case of book built IPOs.

Ghosh (2004) investigated the variables explaining IPO underpricing using 1842 companies that got listed on Bombay Stock exchange from 1993-2001. He finds evidence of signalling theory as an explanation of underpricing in India.

Mishra (2008) examines the changes in underpricing for fixed and book built IPOs. Using a dataset of 315 IPOs that got listed in India from 2000 to 2007 he found an average underpricing of about 29%.

Deb and Marisetty (2010) conduct a study of IPO ratings in India and its relation to underpricing.

Sehgal and Sinha (2013) conduct of a study of 432 IPOs listed in India during April, 2002 to December, 2011 and found short run initial returns to be 24.93%. They also investigate the relation of underpricing and ex-ante uncertainty using different variables like age and issue size.

Shah and Mehta (2015) studied listing day performance pertaining to 113 IPOs in India during January, 2010 to December, 2014, listed on National Stock Exchange (NSE) India. They found significant positive returns on the listing day.

Nalina and Rakesh (2017) investigate the performance of 218 IPOs listed on NSE during the period 2007-2016. They conclude that market has underperformed from 2007 to 2011 due to recession in the global market and outperformed from 2012 to 2016.

INITIAL RETURNS AND EX-ANTE UNCERTAINTY

An important implication of Rock's (1986) winner's curse model credited to Ritter (1984a) and confirmed in Beatty and Ritter (1986) is that the underpricing will be greater in case the ex- ante (before the happening of the event) uncertainty about the value of the company going public is greater. This theory has received solid empirical support. The different proxies that have been used in the past studies fall in the four broad categories: characteristics of the issuer company, offering characteristics, prospectus information and variables in the aftermarket.

Age (Ljungqvist and Wilhelm 2003; Ritter 1991) and others, log sales (Ritter 1984a) or sector to which the company belongs (Benveniste *et al.* 2003) are some of the common proxies which have been used for company characteristics. Offer size (or its inverse) is a popular proxy (Beatty and Ritter 1986) under the offering characteristics.

Number of uses of IPO proceeds as shown in the prospectus (Beatty and Ritter 1986) and number of risk factors provided in the prospectus (Beatty and Welch 1996) have also been used as proxies. Volatility, an aftermarket variable, (Ritter 1984a) relies on information not available at the time of the IPO. The focus of this study is on the relationship between offer size and underpricing.

METHODOLOGY

This section discusses the methodology of the present study.

OBJECTIVES OF THE STUDY

The objectives of the study have been set as under:

1. To find out the extent of IPO underpricing in India for the sample period.
2. To analyze the impact of the *ex- ante* uncertainty on IPO underpricing using offer size as a proxy for the same.

HYPOTHESES

The following Null Hypotheses were evaluated:

Ho1: The mean underpricing in India is not significantly different from zero.

Ho2: Offer size and underpricing are not related.

DATA DESCRIPTION

The data used for this study was acquired from the website **moneycontrol.com** which is an important source of data for IPOs in India. All IPOs issued and listed in India from January 2014 to December 2018 have been included in the sample. The moneycontrol.com database reported 102 IPOs that were issued during this five year period. These IPOs are listed on BSE/NSE.

STATISTICAL TOOLS

The study employs regression analysis and uses T and F statistic to test the hypothesis. The initial processing of the data has been performed on Microsoft EXCEL. EXCEL has been used to conduct regression analysis.

VARIABLES USED IN THE STUDY

The section below provides a detailed description of the variables that are used for the study:

Underpricing/Initial Returns = Defined as the percentage difference between listing days' closing price from the offer price of the security.

Offer Size = The issue size of an IPO log transformed in order to account for the extreme differences.

CALCULATION PROCEDURE OF UNDERPRICING

Underpricing is calculated as under:

$$\text{Initial Returns} = (P_t - O_i) / O_i \times 100$$

Where,

P_t = Closing price of the security on the listing day

O_i = Offer price of the stock i

These returns measure whether an investor gained or lost by buying the shares during the IPO at the offer price and selling at the prevailing price on the listing day. If initial return is positive one can conclude that the issue is under priced; if it is negative it may be inferred that the issue is overpriced and in the rare case of it being zero it means the issue is aptly priced.

Average underpricing is calculated as the arithmetic mean of all individual underpricing as under:

$$\text{Average Underpricing} = 1/n \sum U$$

PROCEDURE FOR TESTING HYPOTHESIS

1. In order to test the first hypothesis, a one sample t-test is conducted in Excel using a Dummy.
2. For testing the second hypothesis, Underpricing, measured as percentage return is taken as the dependent variable while log transformed offer size is taken as independent variable to test the relationship between the two as follows:

$$\text{Underpricing} = \alpha + \beta \ln \text{Offer size} + e$$

RESULTS AND DISCUSSION

This section discusses the results of the study.

UNDERPRICING IN INDIA

Table 1 presents the annual distribution for sample of 102 IPOs over the period from 2014 to 2018. The year 2014 has the least number of IPOs at 05 and year 2017 has the highest number of IPOs at 35. The mean number of IPOs per year were just over 20. It is interesting to note that there is significantly higher number of IPOs during 2016 to 2018 as compared to 2014-2015. To be precise there were 77 IPOs during the three year period between 2016 to 2018 while the period 2014-2015 witnessed only 25 IPOs. We find an average underpricing of 12.61% for the period of study.

Table-1: Annual Distribution of IPOs from 2014 to 2018 and Mean Underpricing

Year	Number Of IPOs	Average Underpricing (%)
2014	05	26.08
2015	20	2.41
2016	25	11.52
2017	35	19.78
2018	17	7.47
Total	102	12.61

Table-2: Descriptive Statistics: Average Underpricing and One Sample T-test of Significance

N	Mean	Median	Standard Deviation	Min	Max	Range	t-statistics	p-value
102	12.61	4.44	34.83	-90.14	151.94	242.07	3.65	.000

The mean underpricing is 12.61% with a median of 4.44 and standard deviation of 34.83. The maximum underpricing is 151.94% while minimum is -90.14% giving the data a range of 242.07.

As the **t-statistics is 3.65** and **p-value is .000**, underpricing is highly significant and the first hypothesis stands rejected.

UNDERPRICING AND SIZE OF ISSUE

The descriptive statistics related to the issue size in India for the sample period 2014 to 2018 is presented in Panel A of Table 3. The mean issue size is 1173.9 Crs. while the median is 514.39 with a standard deviation of 1834.91. The minimum size is 35.87 Crs. while the maximum is 11372 Crs. which shows an extremely high range of 11336.13 Crs. Panel B reports descriptive statistics of issue size after it has been log transformed. The mean issue size reflects the growth of the Indian IPO market.

Size of an issue has been considered an important variable which can explain the anomaly of underpricing. It has been used often as a variable which reflects the IPO quality; larger the issue size lesser is the uncertainty about IPO quality. It is assumed that a company with large issue size would undergo much regulatory compliance and attention in comparison to an IPO with a small issue size. This would entail that large issues are less risky. Therefore, the issue size can be used as a proxy for uncertainty about the IPO quality which in other words means that issue size is a proxy for the risk content of the IPO.

Table-3: Descriptive Statistics and Univariate Regression Results: Issue Size from 2014 to 2018

Panel A: Issue Size(Rs. In Crores)					
	Mean	Median	SD	Minimum	Maximum
Issue Size	1173.9	514.39	1834.91	35.87	11372
Panel B: LnSize					
	Mean	Median	SD	Minimum	Maximum
LnSize	6.42	6.24	1.09	3.58	9.34
Panel C: Univariate Regression Results					
Coefficient	t-statistics		p-value		R ²
-5.66	-1.81		.07		.031

Panel A of the table presents descriptive statistics related to issue size. Panel B shows descriptive statistics after log conversion. Panel C presents regression results using log transformed issue size as independent variable.

Earlier studies in India by Pandey and Arun Kumar (2001) and Ghosh (2004) have also used the issue size as a proxy for the risk content of the IPO. The sampling distribution of the issue size normally exhibits excessive variability, therefore, earlier important studies like Beatty and Ritter (1986) have log transformed the issue size. Similar procedure has been followed in this study to avoid heteroscedasticity. Beatty and Ritter (1986) have also argued that smaller issues are more speculative in nature and hence more risky. Therefore we expect a negative and significant relationship between issue size and underpricing.

Table 3 also reports regression results using log of issue size as an independent variable and underpricing as a dependent variable (Panels C). As expected the coefficient of the issue size turns out to be negative but p-value of .07 shows that it is not significant at 5%. This shows that underpricing was less for the issues with large offer size but the relationship is not statistically significant.

The results of this study are inconsistent with the earlier findings of Ghosh (2004) and Pandey and Arun Kumar (2001). The results also contradict the proposition of Beatty and Ritter (1986) regarding issue size being a proxy for ex-ante uncertainty. However these findings confirm the results of a study by Pande and Vaidyanathan (2009), who found a positive but insignificant relationship between issue size and underpricing. Kumar (2007) also finds a positive but insignificant relationship (only of book built IPOs). Shah (1995) finds strong underpricing amongst large issues as well. The results of this study are also in line with the evidence of Shah and Mehta (2015) who find no significant relationship between issue size and underpricing. As a statistically insignificant relationship is found between issue size and underpricing, the null hypothesis is not rejected.

CONCLUSION

The study has been conducted with the primary aim of investigating the relationship between underpricing and ex-ante uncertainty using offer size as a proxy. It is found that the mean underpricing is 12.61% which is highly significant. However, it is also observed that the average underpricing levels have dropped in India considering the evidence presented in the literature review. This may point towards maturing of the Indian capital markets. The relationship between underpricing and offer size is negative which points to the fact that underpricing is less for bigger issues but the data of the present study fails to establish any statistically significant relationship between the two. This result is unexpected and should not be taken as a conclusive evidence of insignificant relationship between underpricing and ex-ante uncertainty, rather it is suggested that more proxies for ex-ante uncertainty like age, listing delay and sales should be investigated before drawing any conclusion.

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INTERNAL BRANDING – A STUDY AMONG SELECTED PRIVATE BANKS IN BANGALORE

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A well-developed financial system in an economy is an indication of an organised banking structure. Banks channelize funds from the place where it is in surplus to the sector where it is deficient. Banks mobilise funds to investment opportunities thus giving momentum for the growth of the economy. The funds mobilised from the banks are the small household savings of the public. They are the custodians of hard earned money of the public. And this requires the banks to build certain level of trust, confidence and belief in the minds of people. It certainly a challenging task for any organisation or for an institution to develop trust, confidence and belief among its customers. And for an institution like banks it's a big success since it's the place where customers take the risk of parking their hard earned money.

Branding is one of the marketing strategies to build value, confidence, trust and loyalty among the customers. Any organisations should adapt both internal and external branding strategies. Organizations must increasingly concern on internal branding in order to assure that current employees engage in corporate culture and strategy.

According to the research study conducted in the field of management and marketing it is observed that the employees are influential on customers and other stakeholders' brand perceptions. This should be considered in the context of delivering both functional (what are delivered) and emotional (how they are delivered) values (de Chernatony 2002; Punjaisri et al. 2009). This asserts the fact that when employees are aligned with the brand values an organisational brand could achieve a sustainable competitive advantage.

Sullivan (2004), defines employer branding as "targeted long term strategy to manage the Awareness and perceptions of the employees, potential employees and related stakeholders with regards to a particular firm" (Backhaus, Tikoo 2004).

Internal branding is an interdisciplinary concept embracing marketing, management and Human resources concepts. The success of any brand depends on its internal branding strategy. It bridges the gap between business strategy and implementation. The members of the organisation can be united through internal branding, since, they will be aware of what their brand represents and the same will be communicated by them to the customers. Internal branding is a key factor enhancing employee's loyalty, imbibing organisational values and goals. Further, it helps in transforming brand messages into brand reality for customers. This requires internal communication and training from employers for internalisation of brand values among employees.

STATEMENT OF THE PROBLEM

Branding has become indispensable for a service industry. The service industry dominated by banking sector characterized by people oriented, their services are largely intangible, heterogeneous, inseparable and perishable (Kotler). Thus, a totally different brand strategy different from products is required for banking sector. In major service firms measurement of service quality has become an ongoing process.

However, there is also a need for banks to go for internal branding which bonds all the employees through brand values and trust, thus adding equity to total brand value. And this requires managers to implement and monitor internal branding programme as a way of improving service delivery. In this regard this study helps the management of banks to understand the extent of internal branding implications on the employees and steps to improvise the internal branding process.

OBJECTIVES OF THE STUDY

1. To know whether the banks are actively engaged in internal branding.
2. To know employees commitment towards brand and its relation to training.
3. To know whether management communicate brand values to all employees.
4. To know whether employees in the banks are familiar with their banks brand values.

SCOPE OF THE STUDY

This study will provide a valuable information for both the academicians as well as the banks to know the effect of internal branding on employees .Further, giving scope for research study to come up with possible strategies to improvise internal branding among its employees.

RESEARCH METHODOLOGY

The study was conducted on a group of 120 employees of various private sector banks in Bangalore. Sample design included the employees of private sector banks in Bangalore city since private sector banks are extensively involved in brand management compared to the public sector banks. The aim of the study was to identify the degree of involvement of the management of the banks in the process of brand management particularly internal branding and employer branding. A questionnaire consisting of five statements relating to internal branding to which respondents could answer them on a five point likert scale was given. The analysis of the data is done with the help of percentages and bar diagrams.

REVIEW OF LITERATURE

According to Balmer, Kotlar, Keller, 'Brand management has become an indispensable part of an organisational functioning'.

Bachaus and Tikko(2004), Forman (2005), Sharma, Kamalnabhan (2012) and Dryl(2014) have collectively propounded that organisations should give more priority for internal branding so that the employees are inculcated with corporate culture and strategy.

Sullivan (2004), has defined employer branding as 'targeted long-term strategy to manage the awareness and perceptions of the employees, potential employees and related stakeholders with regards to a particular firm'.

Pringle, Thompson(2001) points that when employees are aligned with the brand values, a corporate brand could achieve a sustainable competitive advantage.

According to Canadian Marketing Association, "Internal branding is the set of strategic process that align and empower employees to deliver the appropriate customer experience in a consistent fashion. These processes include, but are not limited to internal communications, training support, leadership practices, reward and recognition programs, recruitment practices and sustainability factors.

Further, Jacobs (2003) argues that, "Internal branding have the attainment of competitive advantage through people as its core objective which is difficult to be replicated".

As per Tukiainen (2001) the corporate messages like value statements in a form of mission and vision of the organisation, employee benefits, delivered through internal communication channels shape the employee's attitudes.

Groom et al. (2008, p. 6) indicate three elements crucial to the success of an employee internal branding strategy and implementation. According to the authors, these are (Groom et al. 2008):

- "pride/confidence - engendering and sustaining pride/ confidence in the company.
- reward/recognition - having appropriate employee reward and recognition (for their contribution to the brand).
- Consistency - consistency in practice of supporting Human Resources programs and practices over time." The authors define these three elements as employee engagement.

From the analysis of the above-mentioned definitions and researches in the field of internal branding it can be concluded that internal branding is a result of employer's internal communication effort to develop a workforce that is committed, loyal and identifies with the set of organizational values and goals.

ANALYSIS AND INTERPRETATION OF DATA

The necessary data is collected by the respondents through the administration of structured questionnaire and interview. Tables are used to make the interpretation and analysis easy. out of 120 questionnaires distributed, 36 were retrieved from Axis Bank, 46 from HDFC bank and 38 from Bandhan bank. The questionnaire consisted of two parts, 15 for the management of all the selected banks. The sent questionnaires for the management were retrieved. The same is depicted in the following table.

Table-1: Questionnaire retrieved

Banks	No. of respondents	Percentage
Axis bank	36	30
HDFC bank	46	38.33
Bandhan bank	38	31.66
Total	120	100

The above table represents that out of 120 questionnaires retrieved, 30% was from Axis bank, 38.33% from HDFC Bank, 31.66 % from Bandhan Bank.

Table-2: Department Responsible for Internal Branding Strategies

Department	Tally	Percentage
Marketing/sales	7	46.67
HR/Administration	5	33.33
Finance	-	-
All departments	3	20
Total	15	100

The above represents that the departments responsible for internal branding strategies. Accordingly, around 47% of the respondents feel that it's the responsibility of the marketing department, 33.33% of the respondents feel that it's the responsibility of the HR/Administration department, 20% of the respondents feel that it's the responsibility of all the departments and none of the respondents feel it's the responsibility of the finance department.

According to the responses from the management team which were contacted in the form of interview, to find out whether or not, there was a brand management team. About 66% mentioned that they had no brand management teams while 33% said they had one.

Table-3: Organization's engagement in selected internal branding processes (%)

Sl. No.	Statements	a	b	c	d	e	Total
1	My bank is actively engaged in internal branding	6	17	21	44	32	120
2	My knowledge of the brand increases my commitment to deliver the brand	5	8	37	34	36	120
3	My bank communicates brand values to all employees	18	28	31	18	25	120
4	Employees in my bank are familiar with the bank's brand values	10	24	42	22	22	120
5	I am aware that my and other employees' salaries are paid by the customers of my bank.	-	-	14	38	68	120

a – Strongly Disagree, b– Disagree, c – Undecided, d – Agree, e– Strongly Agree.

The above results indicate the degree of implementation of internal branding in the surveyed banks. In case of first statement, "The Company I work for is actively engaged in internal branding", nearly 44% of the respondents disagreed with this opinion. And 56% of respondents confirmed this assertion.

Again 50% of the respondents disagreed that knowledge of brand increases their commitment to deliver the brand. It can therefore be concluded that about 50% of respondents did not feel attachment to the brand of the organization

According to survey results, more than 75% of respondents positively assesses the communication of brand value by the management of the banks. It is best assessed statement among all investigated. This is a very significant feature of the bank's internal branding. One of the conditions of bank's internal branding effectiveness, is management's awareness of the importance of brand values transfer to employees.

In response to the statement about employees familiarity with banks brand values, nearly 75% of the respondents show negative response. The knowledge about the brand value among employees was assessed by respondents on a quite low level.

A successful bank can be build when an awareness among the employees is created that the customers are paying their salaries. The response to the statement that the employees' salaries are paid by the customers is very promising since, most of the respondents agree to this statement. To achieve success in a competitive market it is very crucial to focus on client- his need and demands.

CONCLUSIONS

Internal branding is an integral part of any bank's management. It plays a crucial role in the effective management of marketing communications. Internal branding necessitates the cooperation of Marketing, sales, Human resources departments to obtain synergy in banks success. Banks to be successful need to have an effective internal and external branding strategy. Successful internal branding, it is argued, reduces turnover (Boone 2000). Financial Institutions should regularly survey their employees as surveys of employees can

measure employees' attitudes toward the company and their perception of its goals and activities as well as their own place within the bank. Successful brand enable banks to monitor as well as manage the health and stability of their business over time. Constant monitoring and periodic measurement is a prerequisite.

RECOMMENDATIONS

Internal Branding activities should form an on-going part of the company's Human Resource and management functions. It has also been established that employee relationship, as measured by internal branding, adds further equity to the total brand value and contributes to corporate brand strategy. In this direction therefore, it is suggested that managers' implement and monitor internal branding programmes, as a way of improving service delivery. Thus, for internal branding to succeed;

1. Management must prioritize branding process personally.
2. Objectives of internal branding campaign should be set strategically.
3. Regular checks to be undertaken
4. Introduce rewards - intrinsic and extrinsic and measure to determine success.

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A STUDY ON FINANCIAL LITERACY IN TIRUNELVELI DISTRICT

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ABSTRACT

Investment pattern has been dramatically changing after the economic reforms in India. There are several plans to invest and get back high returns, which are easily accessible modern financial offers with sophisticated desires, myriad of products with intricate features and services. The economies around the world financial literacy are increasing as a key pillar for the development of financial system. It also plays a vital role in the efficient allocation of household savings and the ability of individuals to meet their financial goals. People can able to learn the different kinds of financial products offers and features. It is a process through which an individual (or a family) gains a basic understanding of banks, savings, and the importance of good credit. Debt management and knowledge is necessary to take right decision-making like integral part of lives by a responsible person in a family. It must empower common man to reduce the risk/burden and it give a protect using various regulatory aspects. Main objective of this study is to measure the level of financial literacy in Tirunelveli district of tamilnadu using the quota sampling method in scientific criteria.

1.1 INTRODUCTION

Investment pattern has been dramatically changing after the economic reforms in India. There are several plans to invest and get back high returns, which are easily accessible modern financial offers with sophisticated desires, myriad of products with intricate features and services. The economies around the world financial literacy are increasing as a key pillar for the development of financial system. It also plays a vital role in the efficient allocation of household savings and the ability of individuals to meet their financial goals. People can able to learn the different kinds of financial products offers and features. It is a process through which an individual (or a family) gains a basic understanding of banks, savings, and the importance of good credit. Debt management and knowledge is necessary to take right decision-making like integral part of lives by a responsible person in a family. It must empower common man to reduce the risk/burden and it give a protect using various regulatory aspects.

1.2 REVIEW OF LITERATURE

Daniel, et.al (2014) conducted a meta-analysis of the relationship among financial literacy and financial education in the downstream behaviors. It found that the partial effects of financial literacy shrink dramatically when one controls for psychological traits that have been omitted in prior research or when one uses an instrument for financial literacy to control for omitted variables. Lauren (2010) financial literacy education is widely believed to turn consumers into "responsible" and "empowered" market players, motivated and competent to make financial decisions that increase their own welfare. The vision is educated to consumers handling their own credit, insurance, and retirement planning matters by confidently navigating the bountiful unrestricted marketplace. Lewis & Linda (2013) examined the differential impact on high school students of a personal financial management course completed 1 to 4 years earlier. This study used a matched sample design based on a school system's records to identify students who had and had not taken a course in personal financial management. Also, those who took the course did not evaluate themselves to be more savings-oriented and did not appear to have better financial behavior than those who had not taken the course. The study raises serious questions about the long-term effectiveness of high school financial literacy courses. Angela (2009) studied the current economic conditions have raised serious concerns about Americans' financial security, especially for those who lack the skills and resources to withstand financial market downswings and take advantage of upswings. However, significant debate continues about the role of financial literacy, the extent of the problem it truly represents, and the best way to address it. Sumit & Anees (2013) takes into accounts in different dimensions of financial literacy and education in India i.e. financial education its relevance, determinants and, role of regulatory authorities in India. It concludes that the strategy for improving financial well-being of individuals in India should be focuses the young investors. Devamma's case, Buzz India's on-field research has shown that one of the primary causes of poverty in rural Karnataka is not lack of funds, but rather financial mismanagement and a lack in taking up opportunities. Women lack financial literacy and have poor-to-non-existent saving habits. Women who manage household finances pay little attention to their spending habits; they cannot account for their expenses and therefore have no awareness about unnecessary expenditure.

Financial literacy enhances individuals' ability to ensure economic security for their families. In India, on one hand, there is a need to reach out to lower income groups and economically weaker sections, and on the other, to millennial who are hyper-connected and require tailor-made financial products but have limited awareness of the possible financial solutions. There are many studies thought about the financial literacy related among the public and their awareness on the investment and savings, etc. there is a vast scope to study about the financial literacy in all over India.

1.3 STATEMENT OF THE PROBLEM

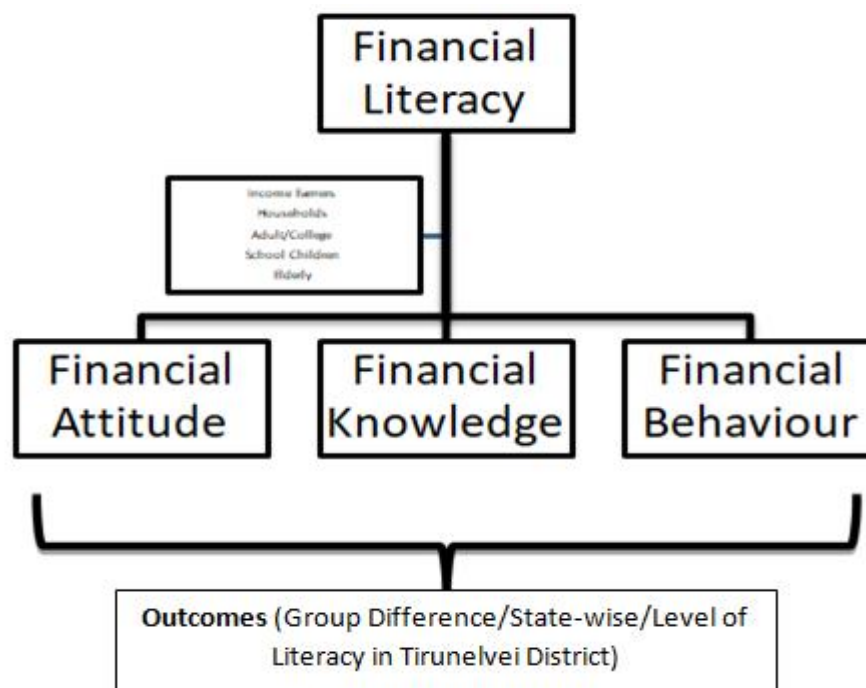
After the liberalization of India, there are huge changes among the investors from the opportunities, especially for corporate. Financial market is offering different products to yield high returns from the investment, but issue is that, people generally were not aware about the importance of financial literacy its features and services. Financial literacy and financial stability are two **key aspects of an efficient economy**. Financial literacy is a growing challenge as developing countries experience an increased access to financial services (Daniel, 2015). This may hamper the quality of their financial decisions without this. **Global Survey S&P** mentioned that, less than 25% adults are financially literate in South Asian countries and 17.5% adult in world population from India but nearly 76% of its adult doesn't understand even the basic financial concepts. Survey also confirms that, it has consistently been poor compared to the rest of the world. In addition, it puts burden on the nation in the form of higher cost of financial security and lesser prosperity. They cannot earn more on their investment. Most of the families in India were financially illiterate as well as borrowers. Recently **RBI Regional Director J K Dash** said that "Gujarat was among the four states where financial literacy had been included in curriculum from class VI to XI in association with Central Board of Secondary Education" and which also should include all other states in India, especially in South India. The phenomenon is not different in the proposed study area of tamilnadu state, especially in Tirunelveli district. The people don't save through a formal institution. The financial illiteracy make people to get into trouble such as; investing, spending, problem-solving and other financial initiative. People are living in a digital era. The role of technology in financial literacy thus cannot be overlooked. This needs to be improved. The present study is proposed to assess the awareness of the public of the study area towards the financial literacy that facilitates for the public to undertake an informed decisions pertaining to financial aspects.

1.4 OBJECTIVES OF THE STUDY

- To identify the factors influencing on the level of Financial Literacy in Tirunelveli District
- To offer suitable suggestions to develop and practice the financial literacy among the Tirunelveli District level.

1.4.1 CONCEPTUAL FRAMEWORK OF THE STUDY

This study is chosen the tirunenveli district in tamilnadu state to examine the financial literacy level among the public using primary and secondary data.



1.5 METHODOLOGY

This research work is used quota sampling method. The sequence of activities carried out in this regard is as follows. In this article, part-II explained. This research is descriptive and analytical in nature. Primary data has been collected through a well-constructed interview-schedule in order to achieve the objectives formed. The secondary data were collected from various books, journals, reports, bulletin, working papers and government reports.

1.5.1 SAMPLING CRITERIA TALUK-WISE IN TIRUNELVELI DISTRICT:

Sl. No	Taluks	Target Sample	Final Sample
1	Alangulam	25	12
2	Ambasamuthram	25	18
3	Cheranmahadevi	25	18
4	Kadayanallur	25	15
5	Nanguneri	25	18
6	Palayamkottai	25	19
7	Radhapuram	25	17
8	Sankarankovil	25	16
9	Shenkottai	25	23
10	Sivagiri	25	11
11	Tenkasi	25	13
12	Tirunelveli	25	25
13	Veerakeralampudhur	25	12
	Total	325	217

1.6 ANALYSIS AND INTERPRETATION

Demographical Factors of the Respondents					
Gender of the Respondents			Age of the Respondents		
Male	55	25.3	Below 20	11	5.1
Female	162	74.7	21 to 30	72	33.2
Marital Status of the Respondents			31 to 40	86	39.6
Single	66	30.4	Above 41	48	22.1
Married	151	69.6	Education of the Respondents		
Place of the Respondents			School Level	65	30.0
Urban	50	23.0	HSC	44	20.3
Semi urban	86	39.6	Diplomo/ITI	13	6.0
Rural	81	37.3	UG	17	7.8
Work of the Respondents			PG	19	8.8
Salaried	45	20.7	Professional	27	12.4
Wage	61	28.1	Others	32	14.7
Business	87	40.1	Earlier financial literacy education		
Unregistered	13	6.0	Yes	83	38.2
Professional	11	5.1	No	134	61.8
Monthly Income of the Respondents			Family Income of the Respondents		
Below 2000	31	14.3	Below 10000	2	.9
2001 to 5000	124	57.1	10001 to 50000	190	87.6
5001 to 10000	49	22.6	50001 to 100000	19	8.8
10001 to 50000	13	6.0	Above 100001	6	2.8

Demographical factors explain that, 61.8% of the respondent's didn't studied about the financial literacy and at the same time compare with urban, semi-urban and rural people were well-planned structure on their investments. 57% of the respondent's monthly income between 2001 to 5000, which is reflects on the family income as 10001 to 50000 as 88% of them, which taught us that, majority of the woman, are playing as a pillar of the family income with the young age between 31 to 40.

1.6.1 FACTORS INFLUENCING FINANCIAL WELL-BEING ON FINANCIAL LITERACY LEVEL USING MULTIPLE REGRESSION METHOD

H1 There is a significant influence of financial well-being factors on financial literacy level in Tirunelveli District of Tamil Nadu.

Multiple Regression was applied to know which independent variable highly impacted on dependent variable of financial literacy level in Tirunelveli District. Before using the analysis, all the variables were checked, using correlation analysis. A positive correlation was found between the variables.

Regression shows that model fit option. The R-square of the model is equal to 43.9% and the adjusted R-square of the model equals 43%. This means that 43% of the changes in the financial literacy level are due to the variations of the independent variables used in the model and rests of them were unknown variable/hidden variables. Adjusted R-square attempts to correct R-square to more closely reflect the goodness of fit to the model in the population. In this case, the value of adjusted R-squared is almost the same as that of R-squared, i.e., 0.439, indicating that the model is a reasonable fit for the population. By using the ANOVA, it was found that F-test of the model is equal to 20.321, at 5% level of significance. If the significance value of the F static is small (smaller than say 0.05), the independent variables do a good job explaining the variation on the financial literacy.

The regression equation is

$$Y = b_0 + b_1 V_1 + b_2 V_2 + b_3 V_3 + b_4 V_4 + b_5 V_5 + b_6 V_6 + b_7 V_7 + b_8 V_8$$

Where b_0 = Constant, b_i 's are co-efficient for $i=1$ to 8 and V_i =Variables for $i=1$ to 8

Table: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	H1
	B	Std. Error				
(Constant)	1.718	.171		10.016	.000	
INCOMEINCREASE	.030	.030	.065	.986	.325	Not Accepted
EXPENSESDECREASE	.033	.029	.077	1.119	.264	Not Accepted
ASSETVALUE	.101	.027	.235	3.744	.000	Accepted
BORROWINGS	.041	.028	.089	1.470	.143	Not Accepted
SAVINGS	.076	.029	.160	2.621	.009	Accepted
WORRIED	.008	.027	.017	.300	.765	Not Accepted
PROTECT	.146	.027	.291	5.334	.000	Accepted
FINANCIAL	.099	.027	.207	3.735	.000	Accepted

Dependent Variable: Financial Literacy Level

**=Statistically significant at 5% level

It reflects that, there is a positive impact of asset value increased for the last five years (0.101) on the financial literacy level of the respondents in tirunelveli district at 5% level of significance. One point change will impact on the financial literacy level as 0.101 point changes/impact. If it is asset increasing, there is a positive signal reflecting towards family improvement as a good financial managing in critical conditions. The high positive impact of "I feel confident to protect myself from any financial loss than last 5 years" (0.146) on the financial literacy level of the respondents in tirunelveli district of tamilnadu. It reflect that, one point change will impact .146 point changes on the financial literacy level due to the variations of protect variable. Followed by the variables like "take financial decision on own" and "savings increased" were positively impacting on the financial literacy level (0.099 and 0.076) at 5% level of significance. Other important indicators such as; income increasing, expenses decreasing, borrowing decreasing and worried about money were found to be negatively impacting on the financial literacy level of respondents (0.030, 0.033, 0.041 and 0.008) which was statistically insignificant at 5% level. It can be conclude that the accepted alternative hypothesis that there is a significant influence of asset value increase, borrowings decrease, protect and take financial decisions variables on the financial literacy level of tirunelveli district in tamilnadu can be accepted. The regression found that among the above factors, protect indicator are highly impacting (0.146) on the financial literacy level of the tirunelveli district respondents.

FINANCIAL WELL-BEING IMPACT ON FINANCIAL LITERACY LEVEL USING WEIGHTED AVERAGE METHOD

Please Compare the followings with five years ago	1 SDA	2 D	3 N	4 A	5 SA	WAM	Rank
My Income has increased over the last 5 years	35	68	56	50	8	72.37	VIII
My Expenses have decreased over the last 5 years	28	56	51	63	19	80	VII
My Assets value has increased over the last 5 years	31	33	65	68	20	83	VI
My Borrowings (Loan / Credit) have increased over the last 5 years 1	18	41	63	75	20	86.12	IV
My Savings have increased over the last 5 years	20	29	81	67	20	86.12	V
Now a days I feel worried about money, than last 5 years	11	29	53	91	33	94.62	III
I feel confident to protect myself from any financial Loss than last 5 years	14	13	74	86	30	98.25	II
I feel confident to take financial decision on my own than last 5 years	12	17	41	101	46	100.37	I

In the above WAM that, respondents were taking their won financial decision making, which is reflecting that, tirunelveli district people can able to take the right decision by themselves whenever the need arising as per the sample respondents.

1.6.2 IMPACT OF FINANCIAL KNOWLEDGE VARIABLES ON THE FINANCIAL LITERACY LEVEL USING MULTIPLE REGRESSION MODEL

HI There is a significant influence of financial knowledge variables on the financial literacy level in tirunelveli district of Tamil Nadu.

Multiple Regression was applied to know which independent variable highly impacted on dependent variable of financial literacy level in Tirunelveli District. Before using the analysis, all the variables were checked, using correlation analysis. A positive correlation was found between the variables.

Table shows the model fit option. The R-square of the model is equal to 54.8% and the adjusted R-square of the model equals 55%. This means that 55% of the changes in the financial literacy level are due to the variations of the independent variables used in the model and rests of them were unknown variable/hidden variables. Adjusted R-square attempts to correct R-square to more closely reflect the goodness of fit to the model in the population. In this case, the value of adjusted R-squared is almost the same as that of R-squared, i.e., 0.526, indicating that the model is a reasonable fit for the population. By using the ANOVA, it was found that F-test of the model is equal to 24.983, at 5% level of significance. If the significance value of the F static is small (smaller than say 0.05), the independent variables do a good job explaining the variation on the financial literacy. If the significance value of F is larger than 0.05, the independent variables do not explain the variation on the financial literacy.

TABLE: COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	H1
	B	Std. Error				
(Constant)	1.342	.172		7.816	.000	
2000	.012	.022	.026	.519	.604	Not Accepted
1000	.080	.026	.165	3.028	.003	Accepted
10000	.074	.026	.154	2.809	.005	Accepted
2000	.101	.028	.212	3.664	.000	Accepted
1000	.009	.025	.017	.359	.720	Not Accepted
INVESTMENT	.035	.025	.072	1.386	.167	Not Accepted
COST	.067	.026	.125	2.554	.011	Accepted
REDUCERISK	.120	.025	.243	4.744	.000	Accepted
INSURANCE	.093	.024	.212	3.923	.000	Accepted
REGULAR	.041	.023	.090	1.778	.077	Not Accepted

Dependent Variable: Financial Literacy Level

**=Statistically significant at 5% level

The regression equation is

$$Y = b_0 + b_1V_1 + b_2V_2 + b_3V_3 + b_4V_4 + b_5V_5 + b_6V_6 + b_7V_7 + b_8V_8 + b_9V_9 + b_{10}V_{10}$$

Where b_0 = Constant, b_i 's are co-efficient for $i=1$ to 10 and V_i =Variables for $i=1$ to 10

It is clear from the above table that there is a positive impact of financial knowledge variables on the financial literacy level of the tirunelveli respondents. There are ten questions raised to test the respondent's knowledge using the interview schedule method. Majority of the respondents were having good knowledge about their financial maintenance can be able to know their good financial literacy as per the requirements. Out of 10 questions, there are six questions hypothesis were accepted and four questions hypothesis were not accepted which was statistically significant at 5% level.

It can be concluded from the above analysis that, among the knowledge variables reducing risk (0.120) is highly impacting on the financial literacy level of the tirunelveli respondents due to investing at different investment rather than investing in one investment.

1.6.3 IMPACT OF BEHAVIOR VARIABLES ON THE FINANCIAL LITERACY LEVEL OF THE RESPONDENTS USING MULTIPLE REGRESSION METHOD

H1 There is a significant influence of financial knowledge variables on the financial literacy level in tirunelveli district of Tamil Nadu.

Multiple Regression was applied to know, which independent variable (Behaviour Variables) is highly impacting on the dependent variable of financial literacy level in Tirunelveli District. Before using the analysis, all the variables were checked, using correlation analysis. A positive correlation was found between the variables.

The above table shows the model fit option. The R-square of the model is equal to 56.1% and the adjusted R-square of the model equals 56%. This means that 56% of the changes in the financial literacy level are due to the variations of the independent variables used in the model and rests of them were unknown variable/hidden variables. Adjusted R-square attempts to correct R-square to more closely reflect the goodness of fit to the model in the population. In this case, the value of adjusted R-squared is almost the same as that of R-squared, i.e., 0.532, indicating that the model is a reasonable fit for the population. By using the analysis of variance, it was found that F-test of the model is equal to 19.922, at 5% level of significance. If the significance value of the F static is small (smaller than say 0.05), the independent variables do a good job explaining the variation on the financial literacy. If the significance value of F is larger than 0.05, the independent variables do not explain the variation on the financial literacy.

TABLE: COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	H1
	B	Std. Error				
(Constant)	.841	.190		4.424	.000	
INCOME	.029	.026	.063	1.143	.254	Not Accepted
INSURE	.085	.028	.162	3.057	.003	Accepted
SHORTAGE	.016	.024	.033	.679	.498	Not Accepted
LEND	.035	.019	.098	1.844	.067	Not Accepted
INVEST	.090	.023	.215	3.859	.000	Accepted
PAY	.056	.027	.106	2.031	.044	Accepted
PURCHASE	.093	.027	.187	3.420	.001	Accepted
LONGTERM	.048	.027	.093	1.765	.079	Not Accepted
SPENT	.041	.029	.085	1.439	.152	Not Accepted
PREPARE	.087	.026	.176	3.339	.001	Accepted
MAINTAIN	.108	.030	.209	3.662	.000	Accepted
FOLLOWUP	.043	.030	.075	1.431	.154	Not Accepted
PRODUCT	.014	.025	.030	.562	.575	Not Accepted

Dependent Variable: Financial Literacy Level

**=Statistically significant at 5% level

The regression equation is

$$Y = b_0 + b_1 V_1 + b_2 V_2 + b_3 V_3 + b_4 V_4 + b_5 V_5 + b_6 V_6 + b_7 V_7 + b_8 V_8 + b_9 V_9 + b_{10} V_{10} + b_{11} V_{11} + b_{12} V_{12}$$

Where b_0 = Constant, b_i 's are co-efficient for $i=1$ to 12 and V_i =Variables for $i=1$ to 12

It is clear from the above table that there is a positive impact of financial behaviour variables on the financial literacy level of the tirunelveli respondents. There are twelve questions raised to test the respondent's knowledge using the interview schedule method. Half of the respondents were having good financial behaviour about their financial maintenance in the name of financial literacy level as per the requirements. Out of 12 questions, there are six questions hypothesis were accepted and six questions hypothesis were not accepted which was statistically significant and insignificant at 5% level.

It can be concluded from the above analysis that, among the behaviour variables, maintaining their financial records timely (0.108) is highly impacting on the financial literacy level of the tirunelveli respondents.

1.6.4 IMPACT OF FINANCIAL ATTITUDE VARIABLES ON THE FINANCIAL LITERACY LEVEL USING MULTIPLE REGRESSION MODEL

H1 There is a significant influence of financial attitude variables on the financial literacy level in tirunelveli district of Tamil Nadu.

Multiple Regression were applied to know, which independent variable (financial attitude) is highly impacting on the dependent variable of financial literacy level in Tirunelveli District. Before using the analysis, all the variables were checked, using correlation analysis. A positive correlation was found between the variables.

The above table shows the model fit option. The R-square of the model is equal to 53.5% and the adjusted R-square of the model equals 54%. This means that 54% of the changes in the financial literacy level are due to the variations of the independent variables used in the model and rests of them were unknown variable/hidden variables. Adjusted R-square attempts to correct R-square to more closely reflect the goodness of fit to the model in the population. In this case, the value of adjusted R-squared is almost the same as that of R-squared, i.e., 0.510, indicating that the model is a reasonable fit for the population. By using the analysis of variance, it was found that F-test of the model is equal to 21.426, at 5% level of significance. If the significance value of the F static is small (smaller than say 0.05), the independent variables do a good job explaining the variation on the financial literacy. If the significance value of F is larger than 0.05, the independent variables do not explain the variation on the financial literacy.

TABLE: COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	H1
	B	Std. Error				
(Constant)	1.216	.160		7.614	.000	
MYINCOME	-.014	.026	-.032	-.532	.595	Not Accepted
MESELF	.018	.029	.036	.597	.551	Not Accepted
RECORDS	.047	.029	.100	1.640	.103	Not Accepted
SPEND	.138	.024	.318	5.758	.000	Accepted
THINKING	-.008	.028	-.017	-.303	.762	Not Accepted
MYMONEY	.050	.023	.113	2.155	.032	Accepted
CHECK	.115	.032	.217	3.655	.000	Accepted
RISKY	.084	.027	.166	3.159	.002	Accepted
INSURANCE	.072	.025	.158	2.838	.005	Accepted
INVEST	.061	.027	.127	2.228	.027	Accepted
RETURNINVEST	.098	.024	.211	4.040	.000	Accepted

Dependent Variable: Financial Literacy Level

**=Statistically significant at 5% level

The regression equation is

$$Y = b_0 + b_1 V_1 + b_2 V_2 + b_3 V_3 + b_4 V_4 + b_5 V_5 + b_6 V_6 + b_7 V_7 + b_8 V_8 + b_9 V_9 + b_{10} V_{10} + b_{11} V_{11}$$

Where b_0 = Constant, b_i 's are co-efficient for $i=1$ to 11 and V_i =Variables for $i=1$ to 11

Regression taught us that, there is a highly positive impact of financial attitude variables on the financial literacy level of the tirunelveli respondents. There are eleven questions raised to test the respondent's attitudes using the

interview schedule method. Half of the respondents were having good financial attitudes about their financial maintenance in the name of financial literacy level as per the requirements. Out of 11 questions, there are seven questions hypothesis were accepted and four questions hypothesis were not accepted which was statistically significant and insignificant at 5% level of confidence.

It can be concluded from the above analysis that, among the financial attitude variables, respondents spent their own money and not borrowing from others (0.138) is highly impacting on the financial literacy level of the tirunelveli respondents, due to their wellness on the financial attitudes.

1.7 FINDINGS, SUGGESTIONS AND CONCLUSIONS

From the multiple regression model found that, among the financial well-being variables, protect indicator are highly impacting (0.146) on the financial literacy level of the tirunelveli district as per response of the sample respondents.

Weighted Average Method analysis reflects that, respondents were taking their own financial decision making, which is reflecting that, tirunelveli district people can able to take the right decision by themselves whenever the need arising as per the sample respondents.

From the multiple regression analysis points of view, among the knowledge variables reducing risk is highly impacting on the financial literacy level of the tirunelveli respondents due to investing at different investment rather than investing in one investment.

From the above multiple regression analysis findings that, among the behaviour variables, maintaining their financial records timely is highly impacting on the financial literacy level of the tirunelveli respondents.

Multiple regression found that, among the financial attitude variables, respondents spent their own money and not borrowing from others is highly impacting on the financial literacy level of the tirunelveli respondents, due to their wellness on the financial attitudes.

It also suggested that, savings habits normally available among the respondents in tirunelveli district.

Appropriate financial literacy techniques or methods should follow by all the respondents.

It also suggested that, financial planning is required to get started their earlier investment plan to meet their shortest goals.

It also recommended that, all the respondents should get awareness between short-term and lot-term investment benefits as per their planning/goals.

The study also recommended that, individually every respondent must review their financial investment either annually or bi-annually or quarterly in a proper road map set for achieve the goals. over two-thirds of the population, is not literate financially.

Basically most survey result in India, literacy level is low. In this juncture, government should create awareness about banking concepts and make them as a master in personal finance towards public advertisement. Such as; financial basics, personal finance, financial planning, employees wages and salary, running a home and raising a family, long term savings and investments moreover financial products for rural people or for entrepreneurs, microfinance, non-banking financial companies, small finance banks, retirement planning, insurance importance etc.

Respondent should hassle free instrument follow for different investments, if possible they must open demat account for effective return.

Financial literacy and awareness are the most powerful antidotes against risky investment traps. public require to understand that the price of financial illiteracy is very high.

Sample of the respondents is very small in the district even though it may reflect entire district people financial literacy level as good and it could be extended in future.

Overall conclusion those, majority of the people in this district were well known/aware on their financial literacy level. Incompetency will limit ability of the respondents to build learned financial decisions. Compare with urban people, semi-urban and rural people were aware on their financial literacy level especially on their knowledge, behavior and attitudes. Alternative hypotheses were accepted in most of the cases except one or two as a result that partially accepted. Reliability is more than 8 and multiple regression method was used to which variable is highly impacted on the financial literacy level in the tirunelveli district.

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“INNOVATION”- THE SOLUTION TO BUSINESS'S REAL PROBLEM: UNCERTAINTY**Dr. Syed Jaffer¹ and Prof. Badiuddin Ahmed²**Associate Professor¹, Deccan School of Management, HyderabadProfessor & Dean², School of Commerce & Business Management, Maulana Azad National Urdu University, Hyderabad

ABSTRACT

As much as we desire control and predictability, uncertainty is a permanent fixture in business. While conditions may seem unfair at times, it's important to remember that most people are exposed to the same effects.

Constant and evolving influences are putting pressure on decision-makers to act in much shorter timescales than most leaders would like. The ‘interconnectedness’ of business, driven by globalisation, means that something happening in one part of the world can have an immediate impact on organisations elsewhere. An event occurring in one country is instantly reported around the world and stories are accessible via the internet almost in real time. The net result is that there is frequently little or no opportunity for reflection before important decisions need to be made. Surviving and thriving in this environment demands a different mind-set and new attributes in today’s leaders. The answer is Innovation either following them and eventually acquiring them or encouraging innovation inside and facilitating swarming.

The main competition in business, in the past and now, always comes from innovation. What's less certain to companies is how to respond. This, however, can be a great opportunity. Many firms have converted problems into opportunities only because of their R&D efforts. These companies eventually became technology leaders as they created a churn in the market.

The world is moving on only through scientific inventions and discoveries which are result of sustained R&D effort. Only this leads to long term business sustainability. By changing to the environmental needs, social needs, tastes and preferences of customers companies can come out with successful innovations and sustain in the business for the long time. Today’s mantra for uncertainty is change/innovation. Change is the only permanent solution for business uncertainty, vulnerability, complexity and ambiguity.

Keywords: Innovation, uncertainty, opportunity, change, problems etc.

INTRODUCTION

As much as we desire control and predictability, uncertainty is a permanent fixture in business. While conditions may seem unfair at times, it's important to remember that most people are exposed to the same effects. There are transformational entrepreneurs who generate some uncertainty in business. This uncertainty must not be exaggerated; it is relatively low for incumbent business but is increasing and thus must be considered. One way of dealing with this non-probabilistic uncertainty is to have an adequate decision policy regarding the uncertainty, and the answer is Innovation, either following them and eventually acquiring them or encouraging innovation inside and facilitating swarming.

WHY INNOVATE?

Entrepreneurs and business leaders are constantly striving to get ahead. One of the major “tools” in the toolbox of every business leader is innovation. Innovation often provides a much needed competitive advantage. That is because we recognize that innovation demands change and change is always challenging. Change is especially difficult when things seem to be “good enough”, because changing “good enough” requires us to take a risk. That said, it is true that innovating is risky business. In the face of making a change, we must let go of “good enough” to potentially gain a competitive advantage.

The reality is, however, that refusing to change is far, far riskier. For example – can you imagine a bank not offering mobile banking? Or an electronic store that doesn’t sell the newest gadget? As consumers, we intuitively understand the importance of businesses keeping up with changes, but as entrepreneurs and business owners, it can be difficult to risk “good enough” to face complex changes that require a great deal of time and resource to implement.

INNOVATE ANYTHING

The truth is, innovation doesn't have to be difficult. Innovation is actually so simple that it can be applied to anything.

The following are examples of success through innovation –

1. Technology companies triggering a paradigm shift by impacting industries

A. Apple – changed music and consumer electronics

B. Uber – changing the taxi business

C. Airbnb – changing the accommodation industry

D. Amazon – changing retailing

2. Technology companies creating new markets / industries

A. Google – with “ Search, etc. ” for a much better online experience

– changed the Advertising world with Adwords

– impacting the mobile, car, utility, etc. industries

B. Facebook – established the ” social network ” market

C. WhatsApp – established the personal communications market

D. Steam – established the online market for licensing games

UNDERSTANDING INNOVATION MANAGEMENT

What besets today’s companies? Is it a lack of innovation or an inability to cope with change? Or, is it the incompetence that underlines the failure to anticipate change and stay ahead of the curve? Either way, businesses need to identify where they are going wrong because innovation as a business strategy is here to stay. The rules of the game have changed. Traditional practices and concepts do not hold water anymore.

For survival, innovation is almost obligatory (Drucker, 1999). An innovation process “connects upstream idea valuation to downstream production and release to market.” Once a well-defined innovation strategy that aligns with business goals is in place, the next step will entail managing it effectively. Like any business function, innovation can be managed.

“Innovation Management is about more than just planning new products, services, brand extensions, or technology inventions. It’s about imagining, mobilizing, and competing in new ways,” says Idris Mootee, author of Design Thinking for Strategic Innovation.

This discipline of managing the innovation process harnesses creative ideas and uses them to build a steady pipeline of innovations that are reliable, repeatable, consistent, and profitable.

Innovation management programs for different companies will vary significantly. For instance, an emerging business is likely to be focusing on one main product, unlike a mature organization that is looking to fortify its position in the market or find new, disruptive innovations. Rapidly growing firms could be looking for ways to extend their core businesses. Deciding between developing new innovations for the future and revitalizing their existing offerings can be tricky.

Finding the right balance is key.

IMPORTANCE OF INNOVATION MANAGEMENT

Innovation plays an important role in an organization’s success. Market leaders derive a significant proportion of their income from new products, according to Forbes. Innovation can take the form of a major breakthrough or incremental improvements to existing products. Solid management can help organizations encourage and support innovation and realize the commercial benefits from it.

STIMULATING INNOVATION

Organizations can encourage employees to innovate by allocating time and rewarding effort. "3M, the company that pioneered scotch tape and post-it notes, derives up to 30% of its revenue from products launched in the past 5 years," The turnaround time for new products in toothpastes (dental care products) has considerably shortened. Many firms have converted problems into opportunities only because of their R&D efforts. These companies eventually became technology leaders as they created a churn in the market.

All the modern inventions –laptops, palmtops, music players, iPods, mp3players, automatic washing machines, dishwashers, water filters are all examples of R&D efforts that had a successful outcome. Who would have

thought that mosquitoes would provide an opportunity for new product development in the form of mosquito mats, repellent creams, vaporizers etc.

Digital photography has made the conventional technique redundant. Computers have confined the typewriters to the museum. E-mail has rendered the snail mail defunct.

The world moves on only through scientific inventions and discoveries which are result of sustained R&D effort .Only this leads to long term business sustainability. Sometimes R&D efforts are also necessitated to meet the regulatory norms eg: green technologies that reduce pollution. Hybrid cars, electric cars, catalytic converters in cars are examples of successful R&D efforts.

Some companies are technology leaders, while others are followers. Some industries prove to be laggards (they are the ones to wake up to the market realities a way bit late).

TEN WAYS TO INNOVATE

- 1) Look for opportunities.
- 2) Be courageous.
- 3) Look for new ventures.
- 4) Find a better way.
- 5) Base it on values.
- 6) Outsmart the competition.
- 7) Solve a problem.
- 8) Recycle and reuse.
- 9) Maximize scarcity.
- 10) Create a brand.

HOW TO MANAGE INNOVATION

Innovation has become management's new imperative. Everybody wants to be the next Apple, Google or Netflix, nobody wants to be Kodak, Blockbuster or US Steel . These days you must, "innovate or die,". You'll feel inspired, then scared and try to innovate that suits your business.

A clear set of principles for action are needed. What good is Steve Job's unfailing design sense? when I can't even get my outfits to match? How can Google's technological supremacy be relevant to me when I can't even figure out my TV remote? In other words, we need to take innovation down from the presentation screen and into working life. Here's how to do that.

SIX KEY LEVERS TO SUCCEED IN A VUCA WORLD

For succeeding in a VUCA (volatile, uncertain, complex and ambiguous) world. stringent action towards the execution of six key operational and strategic levers can come in handy

.1. operational excellence the number one factor. Companies such as Maruti Suzuki have set an example, wherein the CEO has greatly reduced the distance between the team leader and the team. The attention and obsession to detail has helped in creating a virtuous cycle that has helped the company.

2. The second is innovation. Understanding the complex Indian consumer and then addressing need gaps is key. the Godrej example here, in is Godrej's innovation with hair cream. "The company went a step forward, and understood the process to the extent that at the end it was able to offer hair cream at one-third the market price. It is not producing for the rich but for a larger mass,".

3.Choices and tradeoffs is the third important lever. Companies have to understand and accept that they cannot be everything to everyone. "Everyone wants to be a conglomerate, but it does not work for most people,". An example of a company, that made the hard choice but benefitted in the long run, is Bajaj Auto. Bajaj knew that it cannot succeed in both motorcycles and scooters, and choose serve the larger segment of motorcycles, and then focused on it to get it right. "Now, Bajaj Auto is number one or two in the 66 markets where they are operating in. They may not have the highest numbers of sales ,but has the highest profits,"

.4. The next is alignment. In a conglomeration of countries and cultures, ensure the people understand company and its value proposition ,which is very critical.

5. The next thing the organizations require is Leadership and courage, and their leaders capacity to take calls on what to do and what not to do is another lever.

6. Finally, agility and serendipity are also here to play their role. companies are required to excel along these six levers to succeed in India and in global markets.

CONCLUSION

“Innovation Management is about more than just planning new products, services, brand extensions, or technology inventions. It’s about imagining, mobilizing, and competing in new ways For survival, innovation is almost obligatory (Drucker, 1999). An innovation process “connects upstream idea valuation to downstream production and release to market.” Once a well-defined innovation strategy that aligns with business goals is in place, the next step will entail managing it effectively. Like any business function, innovation can be managed.

Organizations can encourage employees to innovate by allocating time and rewarding effort.

Innovation has become management’s new imperative. Everybody wants to be the next Apple, Google or Netflix, nobody wants to be Kodak, Blockbuster or US Steel . These days you must, “innovate or die,”. You’ll feel inspired, then scared and try to innovate that suits your business. A clear set of principles for action are needed. In other words, we need to take innovation down from the presentation screen and into working life.

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FINANCIAL PERFORMANCE OF SELECT AIR LINES IN THE VUCA WORLD

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ABSTRACT

Air transport industry is volatile where the major factors such as Price, Fuel Cost, Scheduled operations, Tax structure etc, are fluctuating in nature. Due to which there exist a chance where the top level management take certain decisions in ambiguity which in turn effects badly on the total financial performance of the company and sometimes it may lead to Liquidation of the company also. A study is carried out to identify the performance of select air lines in domestic market and how much is the Air transportation industry is volatile in nature. Current study focuses on SPICEJET and various decisions taken up by the top management in VUCA situation. Spice jet got an average of 93.7% occupancy ratio, ranging from highest was 96.3% and least was 90.8%. SpiceJet is a low-cost airline headquartered in Gurgaon, India. It is the fourth largest airline in the country by number of domestic passengers carried, with a market share of 13.3% as of October 2017. The airline operates 312 daily flights to 55 destinations, including 47 Indian and 7 international destinations from its hubs at Delhi, Kolkata, Mumbai and Hyderabad.

Keywords: Air Traffic Volatility, Impact of ambiguity on financial performance, Occupancy Ratio

INTRODUCTION

Volatility is a statistical measure of the dispersion of returns for a given security or market index. In most cases, higher the volatility, the riskier is the security. Volatility can either be measured by using the standard deviation or variance between returns from that same security or market index

OBJECTIVES OF THE STUDY

- To study the impact of a ambiguity raised due to a decision on total performance of business
- To study the different volatility stages in a business.

NEED FOR THE STUDY

Normally the aviation industry itself is a volatile one and not much research is under taken in this sector. Thus, there arises a need to study the impact of wrong decision on total performance of the business.

DATA SOURCES

The data is collected through the secondary sources as the NEWS bulletins, Stock market reports, financial reports of the companies etc.

HYPOTHESIS

Ho: The decisions taken by the top level management impacts significantly on the performance of the company.

H1: The decisions taken by the top level management does not impact significantly on the performance of the company.

The following are the successful decisions being taken by the top level management of Spicejet.

1. SpiceJet to start 10 new UDAN flights between March 31 and April 15 2019

The regional connectivity scheme UDAN (Ude Desh ka Aam Nagrik) seeks to connect un served and under-served airports as well as make flying affordable. Low-cost carrier SpiceJet on Friday announced it will start 10 new flights under regional connectivity scheme UDAN between March 31 and April 15. While, eight of these will connect Gwalior to different cities across the country, two will fly on the Bhopal-Udaipur route, the airline said. Additionally, the budget carrier stated that it will start a new flight on the Bhopal-Chennai route from March 31. The Bhopal-Chennai-Bhopal route does not come under the UDAN scheme of the central government. The regional connectivity scheme UDAN (Ude Desh ka Aam Nagrik) seeks to connect unserved and under-served airports as well as make flying affordable. The airline said passengers can book tickets at an "introductory promotional fare" starting at Rs 3,701 (all inclusive) on the Hyderabad-Gwalior, Gwalior-Hyderabad, Gwalior-Jammu, Jammu-Gwalior, Bengaluru-Gwalior, Gwalior-Bengaluru, Kolkata-Gwalior and the Gwalior-Kolkata routes and Rs 2,293 on the Bhopal-Udaipur and Udaipur-Bhopal routes.

2. Buy SpiceJet; target of Rs 103: HDFC Securities, HDFC Securities is bullish on SpiceJet has recommended buy rating on the stock with a target price of Rs 103 in its research report dated February 12, 2019.

SpiceJet printed 3QFY19 revenue of Rs 24.9bn (+19.4% YoY/32.2% QoQ). Spicejet's yield improved to Rs 4.07, +1.8% YoY (Indigo's at Rs 3.86, +4.5% YoY) while load factors declined 220bps YoY to 91.6%. EBITDAR at Rs 4.6bn was above our estimate of Rs 3.0bn mainly as a result of reversal of expenses of ~Rs 250mn (on account of forex movement) and higher operating income at Rs 1bn. Other operating income was higher on account of a one-time (amount not disclosed) equipment selection incentive. Other income at Rs 440mn helped boost APAT, which slumped 77.1% YoY to Rs 551mn. We retain our BUY stance with a revised TP of Rs 103, based on a EV/EBITDAR target multiple of 8x on a Dec 20E EBITDAR. We will be keenly watching the competitive intensity of the industry and the impact it has on yield and load factors. Our estimates remain highly susceptible to ATF prices and currency movements.

3. After record fleet expansion in Q3, SpiceJet looks to maintain the pace, the airline added 12 planes in Q3, compared to one in the first two quarters.

After adding aircraft to its fleet at the fastest pace ever in the third quarter, SpiceJet hopes to make the most of a lower crude, stable currency and better fares, in the coming quarters. In the third quarter, the low-cost airline added 12 new planes - nine Boeing 737 MAX 8 aircraft and three Q400s. Its fleet now stands at 74 aircraft. In the first two quarters, it had added just one. The newfound pace will continue in the fourth quarter, with the company lining up seven Boeing MAX and one 737 freighters to add to its fleet. The expansion matters as the new aircraft promise to be more fuel efficient, giving a fillip to the airline's margins. The fuel-efficient MAX will improve overall operating economics of the aircraft by 8-9%, said Santosh Hiredesai and Chalasani Teja of brokerage firm SBI Capital Markets. The fleet expansion already seems to have rubbed off positively on the airline. Its third quarter fuel CASK (cost per available seat kilometer, a measure of cost) was Rs 1.68/ASKM (available seat kilometer, a measure of capacity), "up only 2 percent QoQ while average ATF prices have risen 6 percent during the quarter," said the report. A clearer picture of the new aircraft's impact will come in the next two quarters. It's "early days to gauge benefit from induction of Max aircraft... While some of this (lower fuel costs in Q3) could be explained by lower fuel burn by the Max aircraft in the fleet (10 out of 74 currently) it is somewhat offset by higher lease rentals. Thus, the jury is still out on the potential benefit of Max aircraft..." said the two analysts. The airline's total order book includes 205 B737-8 MAX, 20 B737 Max10 and 50 Bombardier Q400 aircraft.

4. High rentals

The new inductions though also have a flip side; high rentals. SpiceJet buys aircraft on sale and leaseback model. Under this, it buys an aircraft, sells it to a lesser and then leases it back. This helps it conserve cash and keep debt off its books. But the 737 MAX have higher lease rentals compared to the older generation aircraft. "The induction of the 10 737MAX... pushed up lease rentals by ~11 percent to Rs.60/ASKM. As a result, PAT fell 80 percent YoY to Rs 0.10/ASKM from Rs 0.49/ASKM in Q3FY18," said the report from SBI Capital. That is the reason why most of the brokerages have added a line of caution, even as they reiterated a buy rating on SpiceJet stock. "We reiterate Buy on improving fuel efficiency, falling non-fuel cost with new fleet addition, and short-haul international market opportunity with Boeing-737-8Max," said brokerage Elara Capital in a report. The airline's stock ended Wednesday, down 1.03 percent at Rs 77 a share.

5. Oil price, yield indiscipline, infra constraints pose major challenges: SpiceJet's chief Ajay Singh

Singh said the company is trying to stay out of flight sectors or flight routes where there is stiff competition. Fluctuation in oil prices, yield indiscipline and airport infrastructure constraints remain three main challenges for Indian aviation market, SpiceJet Chairman and MD Ajay Singh said. Yield is the measure of average revenue paid by each passenger per mile. "The largest risk, of course, is oil...From an airlines perspective, what we can do and what we are trying to do is to try and get more fuel efficient aircraft," said Singh. Because of the spike in oil price to up to 86 dollars, airlines were forced to relook at their models and examine where they can make or save more money, he added. "Second (risk) is the indiscipline on yields. I think the massive dumping of the capacity and the ones we saw last year, and that capacity was going into the same markets (sectors or routes) where there were already large number of flights and there was this whole strategy of squeeze out other player from the markets.

"The benefit of flying on Udan routes is that we would be flying to destinations that would remain exclusive to us for a period of three years....So far, Udan routes, barring one or two, have done very well," he said. SpiceJet flies on multiple routes under Udan scheme, largely using its Q400 aircraft. "We have tried to bring down the costs of Q400 operations over the years. We have a plan to convert 78-seater Q400 aircraft to 90-seater aircraft,

and that should be done by July...so by adding more seats to the plane, we are bringing down the costs. "I think some issues around the new aircraft - the ones of Pratt and Whitney engines and the restrictions being imposed by DGCA - should slow down the pace of induction for aircraft in the country," SpiceJet CMD said. This will be a good sign for the industry as the inherent demand remains incredibly strong. If pace of induction slows, it will push up yields. That will be something very positive, Singh added. Jet Airways rises 2% on Rs 4,000-crore rescue plan

Table showing the Occupancy Ratio of SPICE JET during the year 2018

MONTH	Passengers KM's Performed in thousands	Available Seat Kilometre in Thousands	Occupancy Ratio
JAN	1,313,294	1,381,733	95.0
FEB	1,198,160	1,244,492	96.3
MAR	1,322,852	1,392,144	95.0
APR	1,284,337	1,344,688	95.5
MAY	1,319,543	1,391,958	94.8
JUN	1,226,187	1,314,145	93.3
JUL	1,248,731	1,331,839	93.8
AUG	1,229,719	1,313,965	93.6
SEP	1,214,946	1,303,993	93.2
OCT	1,239,910	1,365,552	90.8
NOV	1,330,631	1,461,380	91.1
DEC	1,448,751	1,562,334	92.7
TOTAL	15,377,060	16,408,222	93.7

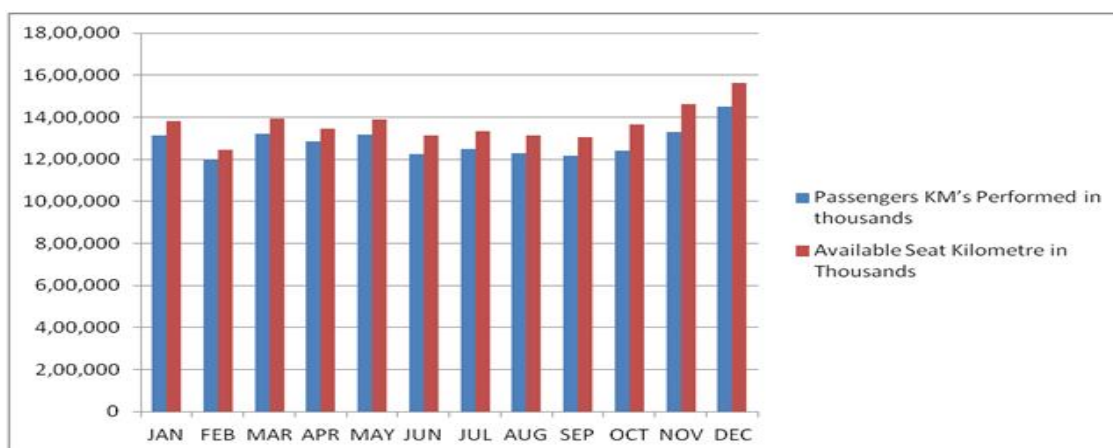


Table showing the Impact on Financial Performance due to Volatility and Ambiguity in Decision making during the Year 2018

PARTICULARS	Mar'18	Jun'18	Sep'18	Dec'18
Net Sales/Income from operations	2,004.71	2,199.70	1,848.28	2,382.21
Other Operating Income	24.6	36.12	32.58	104.59
Total Income From Operations	2029.31	2,235.82	1,880.86	2,486.80
EXPENDITURE : Employees Cost	226.03	247.82	252.63	270.55
Depreciation	59.10	63.09	64.83	61.41
Other Expenses	1733.73	1,904.25	1,949.72	2,103.09
P/L Before Other Inc	10.45	20.66	-386.32	51.75
Other Income	61.43	34.99	29.44	44.03
P/L Before Int.	71.88	55.65	-356.88	95.78
Interest	25.73	30.24	32.49	40.71
P/L Before Exceptional Items & Tax	46.15	25.41	-389.37	55.07
Exceptional Items	----	-63.47	----	
P/L Before Tax	46.15	-38.06	-389.37	55.07
Tax	----	-----	----	
P/L After Tax from Ordinary Activities	46.15	38.06	-389.37	55.07
EPS=PAT/Equity Share Capital	0.77	-0.63	-6.50	0.92

FINDINGS

1. In the first quarter of the year the occupancy ratio was above the average level and the company was making profits.
2. Coming to the second quarter the occupancy ratio got reduced drastically and the company's position turned to negative.
3. In the third quarter the occupancy ratio was constant and the losses were drastically increased.
4. In the last quarter the Occupancy ratio was reduced and the company again turned to positive stage.

The following are the Decisions taken by the top level management of **JET AIRWAYS**

1. Gulf carrier Etihad Airways is likely to infuse around Rs 1,600-1,900 crore into cash-strapped Jet Airways.

NEW DELHI: NSE -1.65 % under a proposed deal wherein Naresh Goyal would step down as chairman of the domestic carrier, according to sources. Jet Airways, a full-service airline, has been grappling with acute financial crunch that has also forced it to ground many planes as well as delay payment of salaries and loan repayments. Under the proposed deal, Goyal would step down as chairman and director of Jet Airways but can nominate two persons to the airline's board. Goyal would be designated as chairman emeritus while his son Nivaan Goyal would be offered an appropriate executive position subject to certain conditions, the sources said. By infusing Rs 1,600-1,900 crore, Etihad's stake in Jet Airways would rise to 24.9 per cent, the sources said citing a memorandum of understanding between the two airlines.

2. Jet Airways secures \$293 mn loan from PNB

Mint Shares of Jet AirwaysNSE -1.65 % rose as much as 4.8 per cent to Rs 255, the highest in over a month after a report said the debt-laden carrier has secured a loan of Rs 2,050 crore (\$293.07 million) from Punjab National BankNSE -0.64 %. The airline has raised foreign currency term loans worth Rs 1,100 crore and a non-fund based credit facility of Rs 950 crore from Punjab National Bank (PNB), according to copies of loan documents reviewed by Indian daily Mint. Jet and PNB did the loan documents mention that Jet will use the credit facility for its working capital needs, but the money would be mainly used to pay rental dues to aircraft lessors and salary arrears, Mint reported, citing a source familiar with the matter. Jet said last week another three aircraft had been grounded due to its failure to make payments, taking the total number to 28, but it has not specified the lessors involved. Jet Airways grounds 2 more planes on unpaid rentals. Beleaguered carrier Jet AirwaysNSE -1.65 % has grounded two more of its aircraft due to non-payment of lease rentals, taking the total number of planes on ground to 23. Almost 20% of aircraft in the airlines fleet are now out of operations. "An additional two aircraft have been grounded due to non-payment of amounts outstanding to lessors under their respective lease agreements," the airline said in a filing to the stock exchanges on Saturday.

3. Jet Airways grounds two more aircraft, likely to impact 75 flights.

Jet AirwaysNSE -1.65 % on Friday said that two more aircraft have been grounded, taking the total to 21, over its non-repayment of dues to lessors. "Further to our letter (February 28), we inform you that an additional two aircraft have been grounded due to non-payment of amounts outstanding to lessors under their respective lease agreements," the airline said in a regulatory filing on Friday. "As mentioned earlier, the company is actively engaged with all its aircraft lessors, and regularly provides them with updates on the efforts undertaken by the company to improve its liquidity." As per the filing, the company continues to provide required and periodic updates to the Directorate General of Civil Aviation (DGCA). On Thursday, the airline had informed the stock exchanges that it had grounded 19 aircraft. According to the official, the airline did inform the DGCA about the grounding and the regulator is monitoring the situation.

Lately, Jet Airways has been in a tight spot financially even as a rescue plan is being negotiated between the airline, its partner Etihad and a consortium of banks.

4. Etihad will invest in Jet Airways, but several conditions apply

As per the MoU for Jet-Etihad deal, 15% of the total share capital of Jet Privilege—pledged to HSBC for a \$150 million loan—will have to be made available to Jet Airways. Etihad has also sought completion of the 4,000 crore interim financing in Jet Airways before making an investment. Etihad Airways PJSC, which owns a 24% stake in Jet Airways (India) Ltd, has set several conditions before its next round of proposed investment in the cash-strapped airline. The infusion of fresh funds, will, however, be subject to approval from the Etihad board of directors. According to the memorandum of understanding (MoU) for the Jet-Etihad deal, 15% of the total share capital of Jet Airways loyalty programme, Jet Privilege Pvt. Ltd, pledged by Jet Airways to HSBC as security for a \$150 million loan, will have to be made available to Jet Airways. Etihad has also sought

completion of the 4,000 crore interim financing as per terms agreed upon by Etihad, Jet Airways founder and chairman Naresh Goyal and a group of lenders led by the State Bank of India (SBI), before it makes a fresh investment in the Mumbai-based carrier.

Table showing the Occupancy Ratio of JETAIRWAYS during the year 2018

MONTH	Passengers KM's Performed in thousands	Available Seat Kilometre in Thousands	Occupancy Ratio
JAN	1,517,279	1,709,402	88.8
FEB	1,457,811	1,611,621	90.5
MAR	1,592,579	1,847,405	86.2
APR	1,572,238	1,836,104	85.6
MAY	1,517,637	1,888,415	80.4
JUN	1,411,036	1,775,723	79.5
JUL	1,473,748	1,757,073	83.9
AUG	1,460,931	1,781,954	82.0
SEP	1,502,922	1,770,161	84.9
OCT	1,490,664	1,826,589	81.6
NOV	1,422,401	1,732,194	82.1
DEC	1,471,987	1,691,359	87.0
TOTAL	17,891,232	21,227,999	84.3

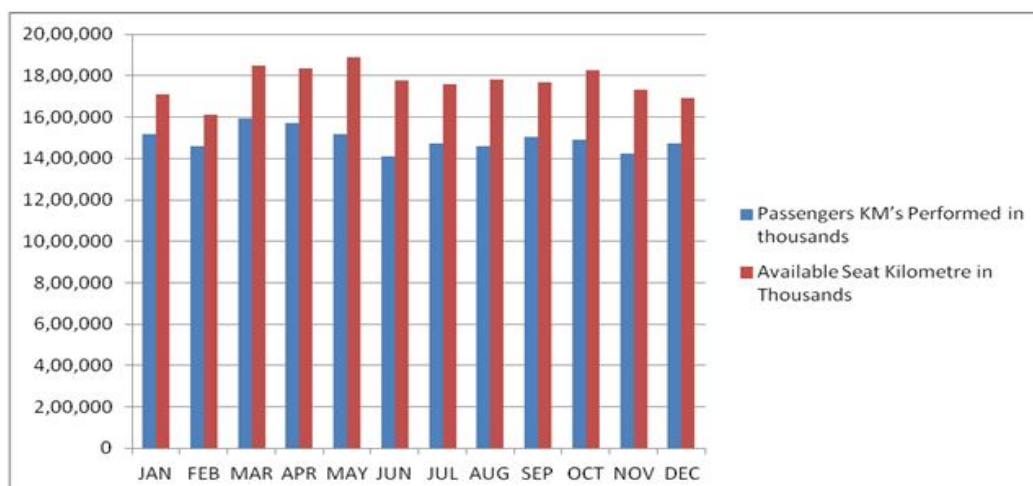


Table showing the Impact on Financial Performance due to Volatility and Ambiguity in Decision making during the Year 2018

PARTICULARS	Mar'18	Jun'18	Sep'18	Dec'18
Net Sales/Income from operations	5,924.85	6,010.46	6,161.15	6,147.98
Other Operating Income	----	-----	-----	-----
Total Income From Operations	5,924.85	6,010.46	6,161.15	6,147.98
EXPENDITURE :				
Employees Cost	773.07	816.29	803.46	781.18
Power and Fuel	2,063.34	2,332.49	2,419.76	2,387.72
Depreciation	165.32	112.08	110.98	110.42
Other Expenses	3,065.59	3,319.11	3,331.24	2,671.44
Admin. And Selling Expenses	787.79	561.06	637.33	578.53
P/L Before Other Inc	-930.26	-1,130.57	-1,141.62	-381.31
Other Income	130.30	56.45	75.54	50.40
P/L Before Int.	-799.96	-1,074.12	-1,066.08	-330.91
Interest	236.04	248.88	231.38	256.86
P/L Before Exceptional Items & Tax	-1,036.00	-1,323.00	-1,297.46	-587.77
P/L Before Tax	-1,036.00	-1,323.00	-1,297.46	-587.77
Tax	-----	-----	----	-----
P/L After Tax from Ordinary Activities	-1,036.00	-1,323.00	-1,297.46	-587.77
EPS=PAT/Equity Share Capital	-19.20	-116.46	-114.22	-51.74

FINDINGS

1. During the first quarter of the year the occupancy ratio was above the average and the losses made by the company were least.
2. In the second quarter the occupancy ratio has declined drastically and losses made was also at its peak.
3. In the third quarter the occupancy slightly improved and the losses were reduced a bit.
4. In the last quarter the occupancy ratio has improved and the losses was reduced considerably.

CONCLUSION

With the help of the Occupancy Ratio, it is clear that the Operations of an Air lines is directly affected with each and every decision being taken by the top level management, as the favourable decision comes as the occupancy ratio increases and the financial performance report of both the companies supports the same. Hence, it can be stated that the decisions taken by the top level management impacts significantly on the overall performance of the company. Thus the Ho is accepted and H1 is rejected.

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GENERATIONAL DIFFERENCES IN PERCEPTIONS TOWARDS TAX PLANNING

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ABSTRACT

Millennial generation has brought in significant changes in the society because of their attitudes and values. Millennial generation has different perceptions towards tax planning. The data has been collected from 60 millennial investors. The present paper investigates whether this generation has differing perceptions towards tax planning. It also understands the factors which influence investors' perceptions towards tax planning. The study also focuses on the interest of the millennial investors towards tax exemptions. The article also comprehends the association between the demographic factors and perception of millennial investors towards tax planning. It is observed that majority of the respondents are aware of various tax planning techniques but should also invest in healthy investments.

Keywords: Millennial investors, tax planning, tax exemptions, demographic factors and awareness

INTRODUCTION

Millennial is the name given to the generation born between 1996 and 1981, dates now clarified by the Pew Research center, although some have seen them as starting in 1980 and being born as late as 2004. In India, there are a several of tax saving options for all the taxpayers. These options would allow for a huge range of exemptions and deductions that would definitely help in limiting the overall tax liability. Research states that the arrival of the millennial generation into adulthood would have a significant impact on society because of their differing values and attitudes.

The present paper investigates whether this generation has differing perceptions towards tax planning.

REVIEW OF LITERATURE

Manjunath. S. Awalakki (2015) "A Study on Investment Patterns and Awareness of Salaried Class Investors" As per the recent survey results salaried employees' investments were not increased as compared with the business persons. With this back ground the researcher intended to study the investment patterns and their awareness regarding the salaried employee's investments in the state of Karnataka.

Monika Arora (2017) "Reflection of Tax Saving Behaviour on Individual Income Tax Assesses": This research paper is related with sensitive and personal financial aspects of individual income tax. The need has been felt by the researcher to undertake an empirical research on the topic to identify the factors that influence the individual assesses to invest in tax-saving schemes and scope for further investment. Depending upon their risk appetite, an increase has been witnessed in number of investment avenues available for investors.

R.Kasilingam and G.Jayabal (2008) in their article titled "Segmentation of Investors based on Saving Motives" analysed that around 95 per cent of Indians agree with the existence of motives to save money and 75 per cent of the people have high level of motivation towards savings. Another important finding of the study is that the level of motives has a significant influence on size of savings. India has high savings rate because Indians have high level of motives to save.

K.Kanagasabapathy (2001) in his article titled "A Technical Note on Savings and Savers as Stakeholders" puts across the concept that in the economic sense, the savings behaviour influence a nation's consumption behaviour. Savings may be influenced by the investment opportunities or investment demands, which in turn depends upon the growth prospects and the potential returns available. The level of savings will also depend upon the avenues available in the economy for mobilising such savings particularly from the household sector in the form of well-developed financial system with a various institutions and markets for different instruments. The study also concluded that nation 's economic policy also influences the savings behaviour of its citizens.

Gupta L.C et.al (2001) in their article "Indian Household's Investment Preference" found that there is a significant shift in the investor 's interest from shares to high quality bonds. The popular belief of investing in bonds requires greater sophistication than investing in shares. The bondholders come from higher income class than shareholders. The causes behind the erosion of investor 's confidence is due to weakness of corporate governance levels and secondary market price volatility. Thus, the study analysed that there is a significant shift in the investor 's interest from shares to high quality bonds.

Aldus Salam and Ummal Kulsun (2002) in their article “Savings Behaviour in India: An Empirical Study” identified that the household sector savings provided the bulk of National Savings. The growth of income is not an effective instrument to influence the savings rate. The favourable macro-economic environment supported by strong structural reforms including liberalisation of financial markets, should help domestic savings to increase substantially.

V.K.Thomas (2005) in his article “Tax Saving Avenues to the Salaried Class” suggested that an optimum plan of saving schemes will bring maximum return and lesser tax burden to the tax payers. In the new scenario, the savings in the form of contribution of PF/ Pension Fund will take a portion, tuition fee paid for children also take a portion. Those who are having housing loans can opt for enhanced payment of Housing Loan principal amount. It has the benefit of reducing the interest liability. For the rest of the amount at the disposal, 20 per cent to 30 per cent could be invested in reliable mutual funds promising high returns. 20 per cent to 30 per cent can be set aside for insuring the life of the assesses, his/her spouse, children including major children. Those persons who are about to retire within 10-15 years can better choose a pension fund that falls due, after retirement. Persons close to retirement also can enhance their contribution to Provident Fund.

NEED OF THE STUDY

The main need of this project is to understand the perception of millennial investors towards tax planning. This project analyses the various factors that are motivating the millennial for investment. The research also aims to serve as an indicator to individuals other than investors for decision making towards levying of taxes.

OBJECTIVES OF THE STUDY

1. To study the awareness among the millennial investors about the provisions in Income tax act.
2. To study the factors which influence investors' perceptions towards tax planning.
3. To study the interest of the millennial investors towards tax exemptions.
4. To study the association between the demographic factors and perception of millennial investors towards tax planning.

SCOPE OF THE STUDY

With regard to the objectives, conducting the research from the perspective of investors would be considerably a suitable approach. The scope of the study is confined only to the millennial investors and their perception towards tax planning. This study is confined only to the twin cities of Hyderabad and Secunderabad.

RESEARCH METHODOLOGY

Primary data is collected based on the responses of 60 millennial investors with the help of the questionnaires. Secondary data is collected through books, journals and magazines. Chi square test is used for data analysis.

HYPOTHESES

H₀₁ Gender has no significant impact on the awareness of tax provisions.

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H₀₂ Investors monthly income has no significant impact on investors' interest in choosing one particular option.

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H₀₃ Occupation has no significant impact on the awareness of tax planning.

H₁₃ Occupation has a significant impact on the awareness of tax planning.

H₀₄ There is no significant relationship between the investment made by the investor and the factors that motivates the investors.

H₁₄ There is a significant relationship between the investment made by the investor and the factors that motivates the investors.

DATA ANALYSIS AND INTERPRETATION

CHI-SQUARE TEST: TESTING THE HYPOTHESIS (INDEPENDENCE OF ATTRIBUTES)

Table-1: Observed Frequency of Gender and Awareness of Tax Provisions

Awareness/Gender	Male	Female	Total
Totally aware	20	15	35
Partly aware	10	7	17
Not at all aware	5	3	8
Total	35	25	60

At 95% level of significance, the chi-square statistic is observed to be 0.9611 which is greater than the p-value 0.05. Hence H_{01} is accepted and can conclude that gender has no significant impact on the awareness of tax provisions.

Table-2: Observed Frequency of Income and investors' interest in choosing one particular option.

Options/Income	0-20,000	20,001-40,000	40,001 and above	Total
Deposits in banks	5	2	2	9
Provident funds	5	3	1	9
Insurance products	8	6	1	15
Postal savings	9	4	1	14
Financial securities	8	5	0	13
Total	35	20	5	60

From the Table 2, at 95% level of significance, the chi-square statistic is observed to be 0.8338 which is greater than the p-value 0.05. Hence H_{02} is accepted and can conclude that Income has no significant impact on the investors' interest in choosing one particular option.

Table-3: Observed Frequency of Occupation and Tax Planning Awareness

Occupation/Awareness	Totally Aware	Partly Aware	Not at all aware	Total
Student	5	2	2	9
Lecturer	8	5	1	14
Private employee	12	3	1	16
Government employee	15	5	1	21
Total	40	15	5	60

From the Table 3, at 95% level of significance, the chi-square statistic is observed to be 0.6714 which is greater than the p-value 0.05. Hence H_{03} is accepted and can conclude that there is no significant impact of occupation on tax planning awareness.

Table-4: Observed Frequency of Investment made by the investor and the Factors that motivates the investors

Factors/Investment	0-5000	5001-10000	10001 and above	Total
Return	4	8	12	24
Safety of principal	3	6	10	19
Diversification	1	4	5	10
Maturity	2	2	3	7
Total	10	20	30	60

From the Table 4, at 95% level of significance, the chi-square statistic is observed to be 0.0096 which is less than the p-value 0.05. Hence H_{04} is rejected and can infer that there is a significant relationship between the investment made by the investor and the factors that motivates the investors.

It is observed that if the investor gets lumpsum money, he would want to invest mostly in financial assets and gold. Majority of the investors invest in order to earn high return and to avail the tax benefits available. It is observed that majority of the investor's investment is of long term in nature. Millennial investors would like to invest in Banking and Fast Moving Consumer Goods sectors. Millennial investor's main objective is to earn maximum return and safety of principal. It is seen that very few of the investors are aware about the rebate. It is observed that most of the investors are not aware about the Exemptions available U/S 10 of the Income tax Act 1961. The millennial investors strongly agree that proper tax planning increases standard of living, savings and wealth.

SUGGESTIONS

From the above findings it is observed that many of the millennial investors are not aware about the exemption's available U/S 10 so, the investors need to have knowledge about the exemptions available in order to avail the deductions in order to make tax savings. From the findings it is clear that proper tax planning increases wealth so the millennial investors should file their tax in a proper manner by availing all the exemptions and deductions in order to increase wealth.

CONCLUSION

From the above analysis, it is observed that returns are the major factors that motivate the millennial investors to invest. Most of the millennial investors invest in various options available in order to reap the tax benefits.

Hence it is concluded that majority of the respondents are aware of various tax planning techniques but should also invest in healthy investments.

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**COMPLEXITIES IN ORGANIZATION S AND IMPACT ON MANAGERIAL DECISION MAKING-
A STUDY**

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ABSTRACT

Today, chain of events shows how complex the world is; unfortunately organizations are hallmark characteristics of complexities. Organizational focus on efficiency through initiatives or innovations does not make any big impact in VUCA environment or era. The hierarchical shift must be autonomous and it is the order of the day to empower employees to make decisions, make communication resistance free. In the VUCA times, momentum matters more than precision. Taking any step to begin the transition is better than remaining constant. The milieu is shifting rapidly, and any organism that does not transform as fast the surroundings stand for extinction. This paper empirically addresses the issues of complexity in VUCA era especially the Complexities with regards to organization and developing employees to meet out the challenges of external environmental attacks; it also addresses the challenges from managerial perspective and leaders perspective to sustain the varying environmental tsunamis.

Keywords: organization, complexity, employees, environment, managerial perspective

INTRODUCTION

Organizational complexity is defined as the amount of differentiation that exists. within different elements constituting the organization. This is often operational as the number of different professional specializations that exist within the organization. Whilst much of the literature of the VUCA world is aimed at the opportunities that leaders may take, little attention is paid to the long-term consequences of working in such conditions for employees. The business world can feel literally like a battlefield and in this respect can be considered to resemble the on-going conditions of trauma.

ORGANIZATIONAL COMPLEXITY

Imagine that you work for a large organization. Not only does this organization have several departments but lots of different projects are going on with several people working on each project. If this was your company, you'd be considered a complex organization. To really understand this term, it's helpful to break down the definition.

Organizational complexity is how multiple entities of an organization differentiate among themselves. It refers to the number of resources that are involved in a division, project, or team. If the size of the organizational structure or system is huge that organization is said to be complex.

In many organizations, complexity poses a recurring challenge for management. It impedes competitiveness and lowers employee morale and retention. In a study by the Economist Intelligence Unit (EIU), more than half of leader's at large companies around the world said that organizational complexity cuts into their profits. The effect of organizational complexity is found more in the IT and technology industry than in any other industries. Many companies have taken a variety of steps to reduce organizational complexities.

REVIEW OF LITERATURE

Moss and Atre who claims that business intelligence is primarily architecture and collection of integrated operative applications and applications to support decision-making, as well as the database that provides businesspeople with an easier access to relevant data

Horney, Pasmore, and O'Shea (2010) in their opinion mentioned note, to succeed, 'leaders must make continuous shifts in people, process, technology, and structure. This requires flexibility and quickness in decision making.'

Williams S (2003) specified that Self-organization is a process typical of the complex adaptive systems in which components of the system communicate with each other in a way that can be described as spontaneous. These phenomena occur in practice in real organizations. Creative organizations are developed through the crisis and no-stability phases and they create a new, more complex form of inside order in an unexpected way

Zack (1999) mentioned in his study that the ability of an organization to learn, accumulate knowledge from its experiences, and reapply that knowledge is in itself a skill or competence that may provide strategic advantage.

- the impact of flexible and adaptive leadership on
- unit performance
- the impact of flexible and adaptive leadership on
- unit performance

OBJECTIVES OF THE STUDY

1. To study the concept and strategies of organization complexities from managerial perspective
2. To study the impact of flexibility on organizational performance

H₀: There is no significant impact of leader's experience/ leader's qualities from organizational perspective

RESEARCH METHODOLOGY

The methodology used in any research work is very important as it provides foundation for research studies. In the first place, the research designs used in all the reviewed studies have something in common as most of the studies employed research design.

Research Type: Descriptive Research

Data Source: The present study is based on both primary and secondary source with regards to primary questionnaire has been developed and administered to respondents and secondary data basically the required information has been derived from various books, articles from news papers magazines, journals and from various related websites which deals directly or indirectly with the topic related to and thereby analyzed the objectives of the present study

Sample size: 50 managers

Sampling method: convenience sampling

LIMITATIONS OF THE STUDY

- Time is one of the limiting factors
- Only qualities of leader/manager were considered for the study for managing complexities in organizations.

DATA ANALYSIS AND INTERPRETATION

Table Leader/manager experience

Manager/leaders Experience	Total
5-10 years	6
10-15 years	14
15-20 years	15
20-25 years	9
25 and above years	6
Total	50

Source: primary source

INTERPRETATION

It reveals from the above data that out of sample 50 (managers/leaders) chosen, 6 respondents possess 5-10 years of experience, 14 respondents possess 10-15 years of experience, majority i.e., 15-20 years of experienced are 15 respondents 9 respondents possess 20-25 years and remaining 6 respondents possess 25 and above years of experience. It indicates that in order to handle the complexities of organization or external complexities managers must have experience and knowledge of both external environment and internal atmosphere in order to be abreast of the environmental changes.

Table Leader/manager Qualities

Manager//leader's Qualities	SA	A	Neutral	DA	total
Self transcendent	1	4	2	2	9
Adaptive decision making	2	6	2	1	10
flexible	2	8	3	1	14

Time management	1	4	2	1	8
analytical	2	3	2	1	9
50					50

Source: The figures are compiled from primary data

Table Cross tabulation of experience and Qualities of leader/manager

experience Leader/manager Qualities	Self transcendent	Adaptive decision making	flexible	Time managem ent	analytical	Total
5-10 years	1	1	2	1	1	6
10-15years	2	4	5	1	2	14
15-20 years	2	3	5	2	3	15
20-25 years	3	1	1	3	1	9
25 and above years	1	1	1	1	2	6
Total	9	10	14	8	9	50

Source: The figures are compiled from primary data

INTERPRETATION

From the above table it has been found that out of 25 respondents in the experience(2) group of 5-10 years,1 respondent mentioned for self transcendent, 1 respondent mentioned flexible with regards to the age group 10-15 years (8) 2 respondents mentioned as self transcendent, 2 respondents as adaptive decision making, with regards to 15-20 years of experience,(10) 1 respondent said adaptive decision making, 3 respondent said time management,5 respondent mentioned flexible. With regards to 20-25 years of experience,(3) 1 respondent said adaptive decision making, 1 respondent said time management,1 respondent mentioned analytical. With regards to 20-25 years of experience,(2) 1 respondent mentioned as time management another respondent mentioned as analytical.

It depicts that this experience group with regards to 15-20 years of experience are more prone to adaptive decision making, time management and analytical.

Table- Anova

Anova: Two-Factor Without Replication				
SUMMARY	Count	Sum	Average	Variance
5-10 years	5	6	1.2	0.2
10-15years	5	14	2.8	2.7
15-20 years	5	15	3	1.5
20-25 years	5	9	1.8	1.2
25 and above years	5	6	1.2	0.2
Self transcendent	5	9	1.8	0.7
Adaptive decision making	5	10	2	2
flexible	5	14	2.8	4.2
Time management	5	8	1.6	0.8
analytical	5	9	1.8	0.7

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	14.8	4	3.7	3.148936	0.043456	3.006917
Columns	4.4	4	1.1	0.93617	0.468041	3.006917
Error	18.8	16	1.175			
Total	38	24				

The ANOVA Two-way to find whether there is any significant relation between Respondents experience and respondent's managerial/leadership qualities

$\alpha = 0.05$

H_0 Accepted

Between Rows:

F calculated value=3.148936 (at Degree of Freedom 4,16)

Table Value: 3.006917

Since F cal value is > than F table value

Accepted H_1

Between Columns:

F calculated value=0.93617 at Degree of Freedom (4, 16)

Table Value: 3.006917

Since F cal Value < Table Value

Accept H_0

FINDINGS AND SUGGESTIONS

- From the above interpretation it is found that majority of respondents with regard to leader's/manager's experience most of the respondents who possess 15-20 years of experience have abundance of analytical capabilities and time management it is also found that the managers/leaders who possesses few years of experience are less transcendent and less time management.
- Most of the respondents have been found to have flexibility it indicates that today's managers/leaders are giving room for environmental change and are ready to upgrade to fit into the environment

SUGGESTIONS

1. Leaders/managers who possess limited experience must be trained to acquire conscious of good time management and more self transcendent.
2. Young managers are flexible and adaptive, their talents and skill set must be utilized for the growth and development of the organization and they must acquire good analytical conscious with regard to complexities at both external and internal environment in VUCA or testing times.

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A STUDY ON VUCA AND IT INFLUENCING ON TALENT MANAGEMENT -WITH REFERENCE TO IT SECTOR

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INTRODUCTION

If you have been keeping up to date with the technical, social, political and economical realities of the environment in which business are operating in today. The acronym VUCA- Volatile, Uncertain, Complexity, Ambiguity, which influences in talent management. The companies need more innovative and creative of talent management and should be highly competitive in VUCA world.

The talent management in VUCA world it must be agile and adaptive. It should adopt four areas for talent management like leadership development, talent acquisition, innovation and analytics. These four areas are adopted to fulfill the requirements in VUCA world. In industries they want to hire new talent as managers then they have under the conditions of VUCA. That VUCA is “new normal” it is time to develop and to begin the transforming the talent management today.

The “V” in the VUCA stands for volatility . It means the nature , speed , volume , and magnitude of change , which is unpredictability pattern and in organisation for new talent its need some change which leads to organisation success.

The “U” in the VUCA stands for uncertainty . It is lack of unpredictable in some issues.

The “C” in the VUCA stands for complexity. It having numerous causes and involved in problems. It leads to decision making for talent management.

The “A” in the VUCA stands for ambiguity which means lack of clarity.

For sustainable talent management in VUCA environment it need talent practices to attract the employees who are retaining and to reach the organisation goals.

Every individual works in an organisation. If it is an IT sector organisation need highly talented employees to achieve the organisation success.

OBJECTIVES

- To develop a sound integrated talent management plan designed to close the talent gaps.
- To develop a succession and retention plan to sustain organisation excellence in VUCA environment.
- To analyse the talent management process and strategy.
- To known the resources is highly impacted
- To adopt the leadership qualities for talent management in VUCA world.
- To provide the learning and professional development to enhance the abilities of employees for organisation success.

LITERATURE REVIEW

A literature review is both a summary and explanation of the complete and current state of knowledgs on the topic. Dr.M.S.Narayana and C.Uday kumar explained briefly about a study on VUCA on talent management. It gives us how the employee enjoys with the talent practices in VUCA world with engaging employees and they include digitization, connectivity, trade liberlization, global competition and innovation for the organisation success with talent management in VUCA world.

METHODOLOGY

Data is collecting information about the study and the data is classified into two types: 1.Primary data

2. Secondary data

PRIMARY DATA

Primary data is a information collected from sources as questionnaires or surveys by the sample random method. For this study we have taken the sample size 60.

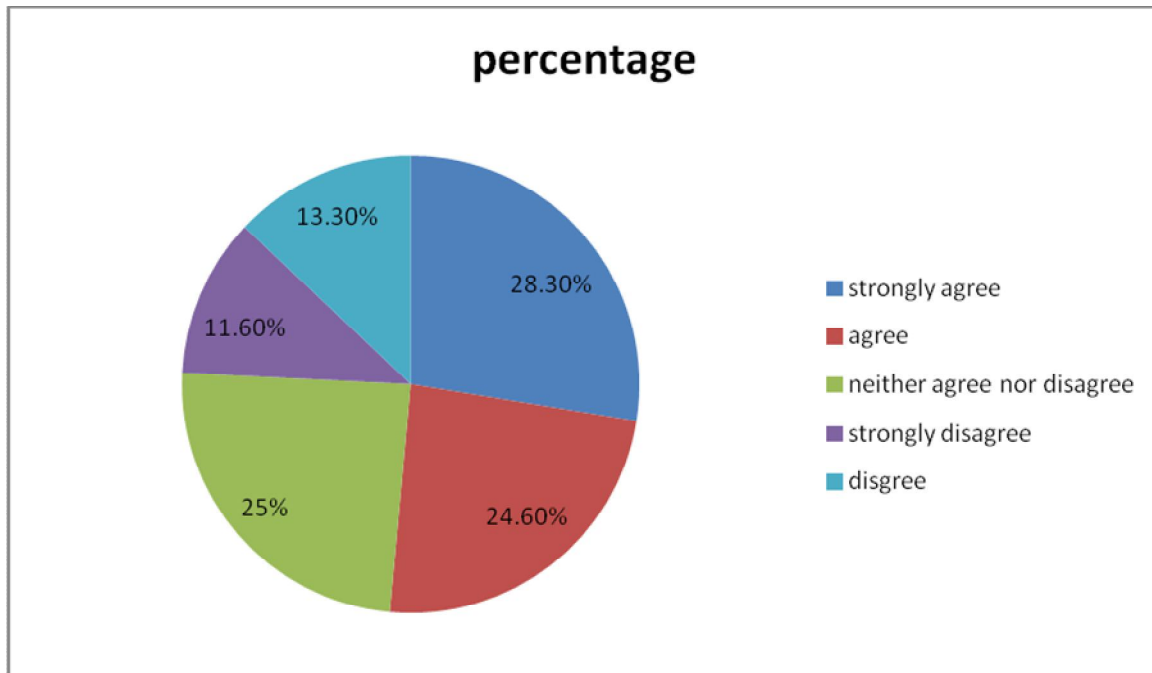
SECONDARY DATA

Secondary data is information that is already available in published sources like magazines and internet.

QUESTIONNAIRE

1) Is talent management managers and work force planners are preparing for VUCA?

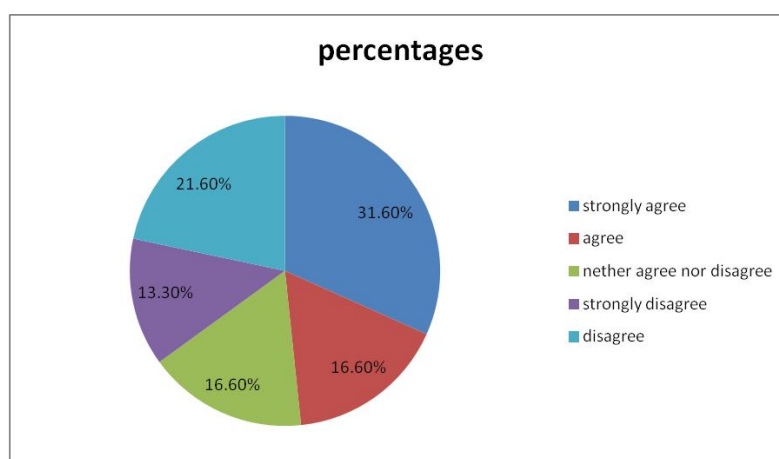
Attributes	Respondents	Percentage
Strongly agree	17	28.3%
Agree	13	21.6%
Neither Agree nor disagree	15	25%
Strongly disagree	7	11.6%
Disagree	8	13.3%



INTERPRETATION: From the above analysis 28.3% , 21.6% employees are agree that they are preparing for VUCA because for talent managers skills to be prove and 25% are neither agree nor disagree , 11.6% and 13.3% are disagree because they don't want to support talent management.

2) Is they hiring Agile employees in VUCA environment?

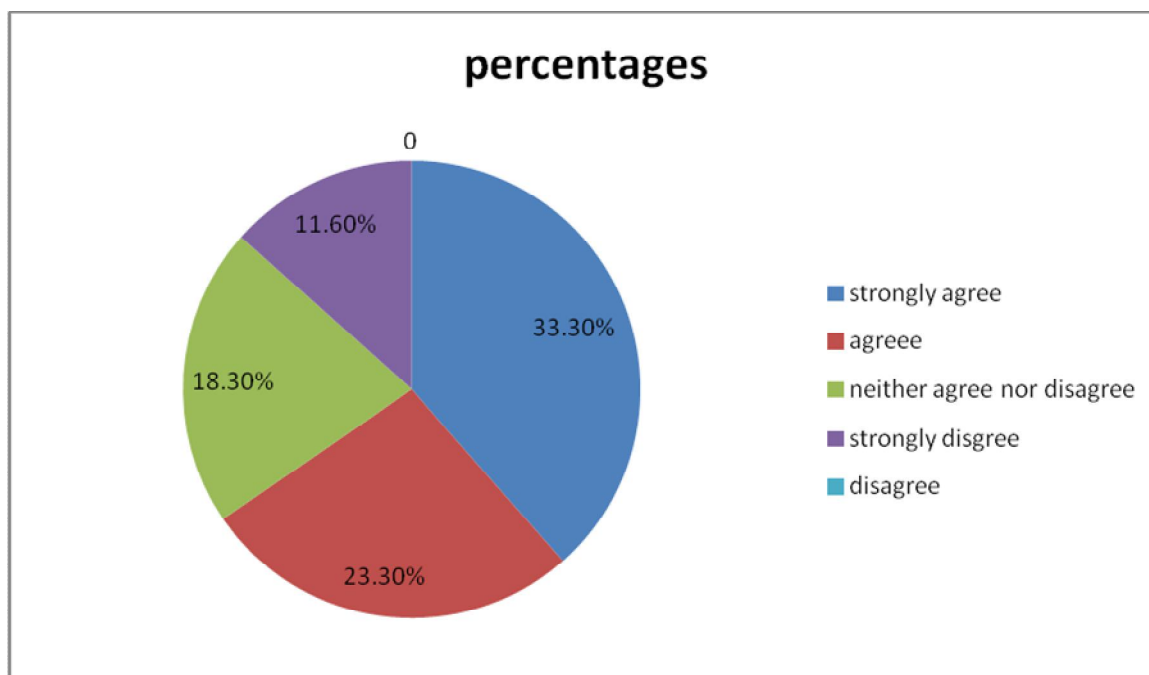
Attributes	Respondents	Percentage
Strongly agree	19	31.6%
Agree	10	16.6%
Neither Agree nor disagree	10	16.6%
Strongly disagree	8	13.3%
Disagree	13	21.6%



INTERPRETATION: From the above analysis 31.6%, 16.6% are agree to hire agile employees because they adapt any change in the organisation easily, 16.6% are neither agree nor disagree, 13.3% and 21.6% are disagree because they don't accept anything easily.

3) Does VUCA is focus on innovation?

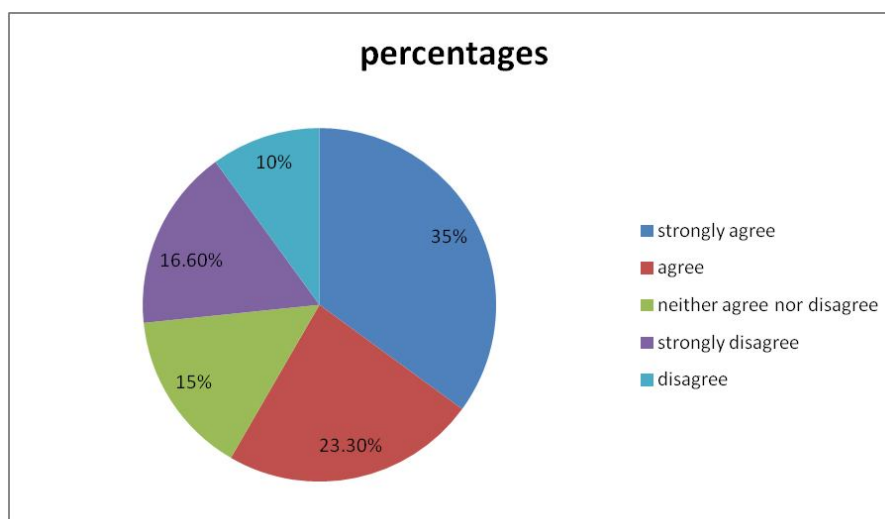
Attributes	Respondents	Percentage
Strongly agree	20	33.3%
Agree	14	23.3%
Neither Agree nor disagree	11	18.3%
Strongly disagree	7	11.6%
Disagree	8	13.3%



INTERPRETATION: From the above analysis 33.3%, 23.3% agree that they need innovation for future and 18.3% are neither agree nor disagree and 11.6%, 13.3% are disagree because they don't think about future

4) Is talent management process and strategy is vital for every organisation?

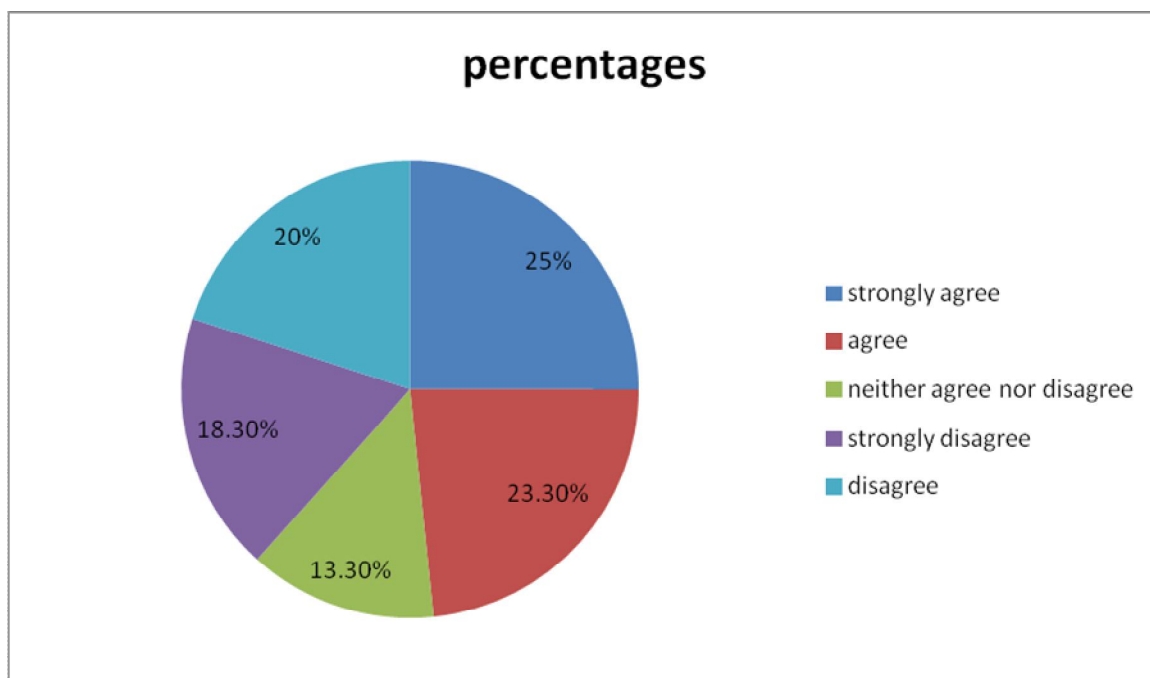
Attributes	Respondents	Percentage
Strongly agree	21	35%
Agree	14	23.3%
Neither Agree nor disagree	9	15%
Strongly disagree	10	16.6%
Disagree	6	10%



INTERPRETATION : From the above analysis 35% ,23.3% are agree that they need strategies and process for organisation success because without strategy they can't do anything , 15% are neither agree nor disagree and 16.6% ,10% are disagree they thinking that process and strategy is not vital for organisation.

5) Does resources are highly impacted in TM?

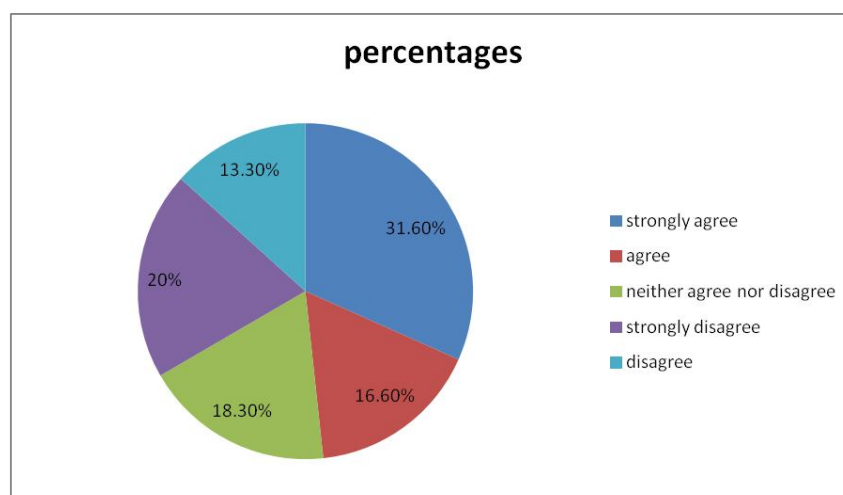
Attributes	Respondents	Percentage
Strongly agree	15	25%
Agree	14	23.3%
Neither Agree nor disagree	8	13.3%
Strongly disagree	11	18.3%
Disagree	12	20%



INTERPRETATION : From the above analysis 25%, 23.3% are agree that for every organisation they need resources for end result so it is highly impacted in talent management , 13.3% are neither agree nor disagree and 18.3% , 20% are disagree that resources are not highly impacted .

6) Is Volatile, Uncertain, Complexity, Ambiguity (VUCA) leads to organisation success?

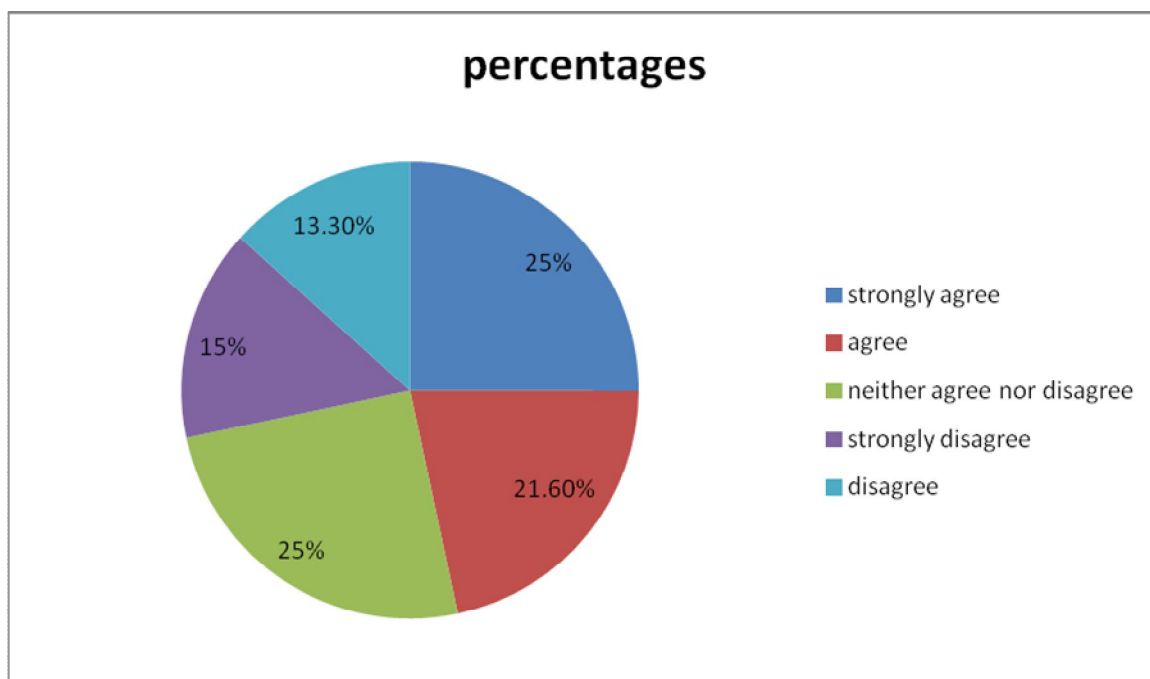
Attributes	Respondents	Percentage
Strongly agree	19	31.6%
Agree	10	16.6%
Neither Agree nor disagree	11	18.3%
Strongly disagree	12	20%
Disagree	8	13.3%



INTERPRETATION : From the above analysis 31.6% , 16.6% are agree that VUCA is the main theme to lead the organisation and 18.3% are neither agree nor disagree and 20%, 13.3% are disagree for the theme.

7) Is rapidly changes are accepted by the employees?

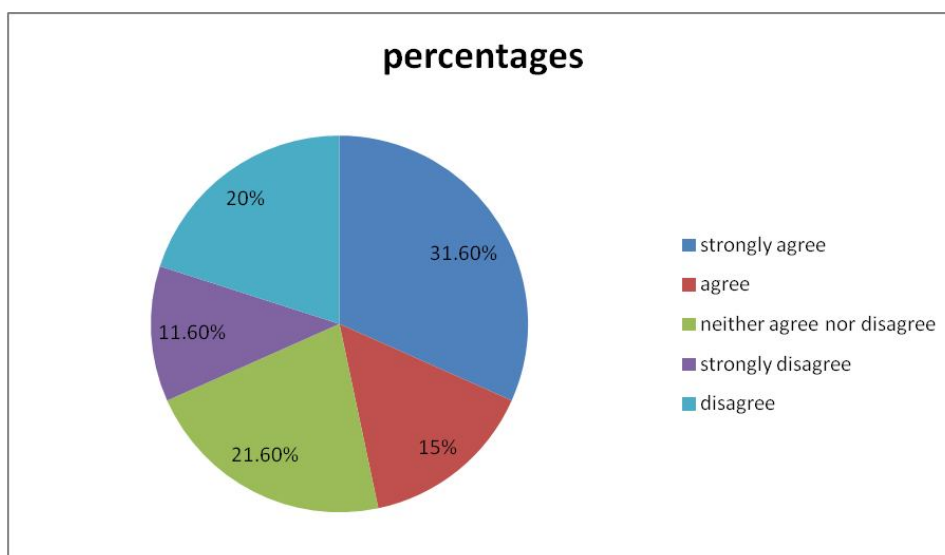
Attributes	Respondents	Percentage
Strongly agree	15	25%
Agree	13	21.6%
Neither Agree nor disagree	15	25%
Strongly disagree	9	15%
Disagree	8	13.3%



INTERPRETATION : From the above analysis 25% , 21.6% are agree that volatile nature is accepted by employees and 25% are neither agree nor disagree and 15% , 13.3% are disagree for volatile nature.

8) Does the leadership qualities are clearly adopted by the TM?

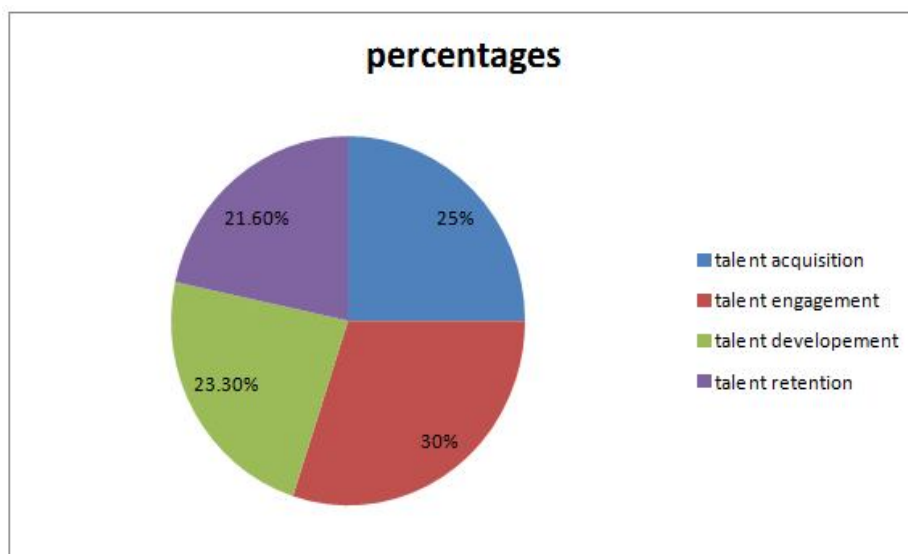
Attributes	Respondents	Percentage
Strongly agree	19	31.6%
Agree	9	15%
Neither Agree or disagree	13	21.6%
Strongly disagree	7	11.6%
Disagree	12	20%



INTERPRETATION : From the above analysis 31.6% , 15% are agree that leadership qualities are clearly adopted by talent management because employees need leader for guidance to achieve organisation success and 21.6% are neither agree nor disagree , 11.6% and 20% are disagree that not many leadership qualities are not adopted in organisation.

9) Which talent practices are adopted by the IT sector in VUCA

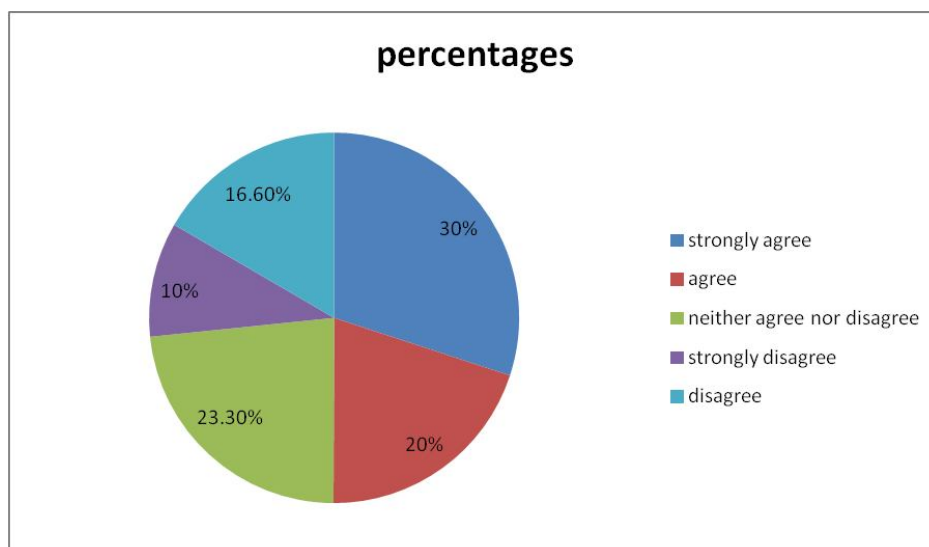
Attributes	Respondents	Percentage
Talent acquisition	15	25%
Talent engagement	18	30%
Talent development	14	23.3%
Talent retention	13	21.6%



INTERPRETATION : From the above analysis they have some the talent management practises from the practises talent engagement is highly adopted in IT sector in VUCA.

10) Do they providing learning and professional development to enhance the attributes for the employees in VUCA world?

Attributes	Respondents	Percentage
Strongly agree	18	30%
Agree	12	20%
Neither Agree nor disagree	14	23.3%
Strongly disagree	6	10%
disagree	10	16.6%



INTERPRETATION : From the above analysis 30% , 20% are agree that they need learning and professional development because employees need highly learning to achieve the employee and organisation goals and 23.3% are neither agree nor disagree , and 10% , 16.6% are disagree that for enhancing abilities for employees are that much in the organisation.

CONCLUSION

Talent practices which are like acquisition, retention are involved in the organisation in IT sector as a challenge. Because they are highly effort to recruit, retain and develop highly productive and promotable people who are really suits to VUCA world. The learning speed of each and every employee must be increased and they need rapid learning, it should be identified and shared with everyone in the organisation for better success. Every employee in the organisation need highly talent to engage and also need leadership qualities in VUCA world.

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A COMPARITIVE STUDY ON MSME EQUITY IPOs AND EQUITY IPOs

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The study offers immense potential to become a separate assets class for market survey investor, arbitrageur and speculator. The study of SME IPO is undertaken to analyse the listing practices with special reference to SME's. The study period is from March 2017 to June 2018. The samples are taken from the IPO and SME IPOs in INDIA. The techniques used to analyse the performance of IPO's and SME IPO's are Standard deviation, P/E ratio, EPS. The findings of the study are that SME IPO's have shown improved performance after listing. Hence, more SME's must be educated about listing in the SME exchanges. Also primary market gives higher return than the secondary market. It was also found that SME IPO's were riskier than mainboard IPO's but their returns were much more compared to the mainboard IPO's. So an investor should take wise decision in choosing the best company by doing fundamental analysis and checking market conditions and trends.

INTRODUCTION

For the industrial and commercial development of a country a principled capital market is an essential criterion. For free and balanced flow of financial resources into the economic system operating in a country, capital market is a central coordinating and directing mechanism. The companies in need of capital to expand, modernize or diversify their business are helped by it. To get the required capital, company usually goes for the issue of shares and the process is done in the primary market. The primary market simply put is defined as a market where the securities are sold to raise the funds or the capital required by the company. The market provides channel for sale of new securities. The securities can be of different types such as equity shares, preference shares, debt instruments, bonds etc. The component of the capital markets that deals with the issuance of new securities is the primary market. Companies, governments or public sector institutions obtain funds through the sale of new stocks. A new stock issue is called as initial public offering (IPO). Long term instruments are created by primary market through which corporate entities borrow from capital market. Primary market is an opportunity provider to issuers of securities like government as well as corporates for raising capital to meet investment requirements and discharge obligation. Primary market also called New Issue Market deals with new securities not previously available and offered for the investment to the public for the first time. The primary market does not have any administrative organizational set-up nor does it have any centralized control and administration for its working. It is identified by the services that it gives to the lenders and borrowers of capital. The stake of existing shareholders is diluted as a proportion of the company's shares. However, they hope that the capital investment will add value to their shareholdings. Also, a listed company can issue further shares via a rights issue, thereby again gather capital for expansion without incurring any debt. The key incentive for many companies seeking to list is the regular ability to raise large amounts of capital from the general market, rather than having to seek and negotiate with individual investors. The process by which funds are raised from the capital market provides base for comparison between primary and secondary stock market. In the primary market securities are offered to the public in the form of subscription with the intention of raising money whereas trading of already existing securities take place in the secondary market refers. The secondary market is often called dealer market or an auction market. The stock exchange is an example of auction market is whereas an OTC or over the counter represents a dealer market. The securities, stocks or bonds are bought directly from the issuing company in a primary market. These are usually purchased at a "par value". The existing securities, bonds or stocks are traded again in the secondary market. For instance, an individual who had purchased bonds or any other investment instruments from the primary stock market a year back, now wants to avail of the principal amount can sell the bonds in the secondary market.

OBJECTIVE OF THE STUDY

1. To study subscription of SME and General IPO's
2. To study risk and return of SME and General IPO's
3. To study performance of SME and General IPO's since their listing

These factors will help us to understand and suggest any improvements to the SME IPO procedure.

LITERATURE REVIEW

Tripathi, Pradhan and Pandey [2017] emphasized on the importance of MSME sector in economic development of India. Nearly 8 crore people are provided employment opportunity and this sector contributes 8% towards GDP and 40% of country's exports. SME Exchange are permitted and granted recognition by the

SEBI to list the specified securities issued in accordance with ICDR regulations, (2009), but does not include the main board. ANOVA, Correlation is used find significant relationship existed between magnitude of underpricing and subscription rate. This study was implied for investors, small business houses, investment bankers and regulatory bodies.

SHIRAI [2004] studied and emphasized on the fact that India's financial and capital market reforms since the early nineties had a positive impact on the performance of the banking sector and the capital market. In the developing Asian countries, most of SME's have access to very few internal sources (retained earnings) to finance their operations as their profits are very low. However the credit demand is very high due to the fact that the economy is expanding at an astonishing rate. So, the respective governments felt the need to develop a separate capital market for the MSME's (Micro Small and Medium enterprises). Firm-level data was used to analyse changes in the allocation of loans in the reform period.

Rai [2015] study aimed to focus on the scenario of SME exchanges in the Indian Stock Market and also identify the approach to popularize the SME exchange in India. Its contribution to exports was about 34% and was responsible for generating 7% of the country's Gross Domestic Product (GDP). The support given by the national and the state governments to the SMEs was not sufficient enough to solve their problems. It was quite evident that, nurturing this sector was essential for the economic well-being of the nation. SME Stock exchange played a vital role in providing financial support to SMEs.

Banerjee in his research advocated reinventing the OTCEI (Over the counter exchange of India) for providing equity market access to SME's. The OTCEI was setup with the vision of providing equity market access to SMEs in India. Several years after OTCEI's inception, the original motivation for setting up such a platform was still holding good. The design held good as there were many enablers to make the idea an astonishing success. Thus the OTCEI was revisited and parallel lessons were drawn from similar successful international experiments particularly, AIM and NASDAQ.

Harwood and Konidaris [2015] in their research for World Bank Group pointed out the fact that many emerging market countries in the recent years had developed or were toiling hard to develop SME Exchanges to provide financing to SMEs, but only few of them had succeeded in this endeavour. Government commitment is also key, because government efforts can affect the SME exchange's ultimate success. As is true with developing any marketplace, technical challenges are significantly easier to address than structural ones such as the corporate culture, size of the local investor base, and macroeconomic and political environment.

Pandya [2016] evaluated IPOs' performance from day of listing to long-term period based on factors like average abnormal return, cumulative abnormal return, buy and hold abnormal return, wealth relative, and market adjusted abnormal return. Tools used (AAR) and cumulative abnormal return (CAR). Further, long-run performance was tested by applying methodologies like "wealth relatives" (WRs), "buy and hold abnormal return" (BHAR), and short run by applying "market adjusted abnormal return" (MAAR). The analysis by both the methods indicates that IPOs are underperformed on the first day and immediate time period, after wards the return decreases, and from medium- to longer-term time framework.

Jacob and Agarwalla [2015] in their research tried to examine effect of grading of IPO's on the pricing efficiency. The research analysis involved cross-sectional regression analysis of the measures of underpricing and demand as dependent variables with a set of dependent variables to represent various firm, issue and market characteristics. Regression was used to depict that the grading of IPO's did not have any significant impact on their pricing and demand. It was found that the differences in the grading did not significantly explain the cross-sectional differences in market-adjusted underpricing.

Shinozaki [2014] A key policy pillar to better serve various financing needs of SMEs and expand their financial accessibility was the diversification of financing modalities beyond conventional bank lending. The rapid growth of developing Asian countries was generating needs for long term SME funding and requirement of robust capital markets as an alternative channel for providing their growth capital. The G20 Leaders also emphasized on importance of promoting long-term financing for SMEs in the context of investment. It was found that the potential of capital market financing for SMEs in emerging Asia was good.

Sabarinathan in his research analysed that there was huge volume of literature on Initial Public Offerings (IPOs) by Indian firms that had sought to explain the efficiency of pricing and the post issue performance of companies that make IPOs in terms of institutional features of the securities market or some specific features of the issuers. Briefly, it emerges from the analysis that over the years the market has been receiving fewer issues, but of increasing size from larger firms with an established track record. Issuers seem to be offering a smaller

fraction for public ownership at the IPO and have been listing on fewer exchanges. Fewer issues are priced at par during the later part of the period of analysis than the initial years.

Lunawat in his research found the very basic factor which led investors to invest in an SME IPO was reputation and popularity of company in local markets. However, as the company became more established, investor base often gets broadened. Also with number of SME stocks increasing and higher returns thereon, more and more investors were getting attracted for investing in SME's. The concern of low liquidity, however, was addressed by the mechanism of mandatory market making, which provided a cushion in secondary market in the role of counter-party. Thus the government took several initiatives to support the SME's and it must also ensure that the initiatives kick off and work effectively.

Thakur [2016] analysed that SMEs are facing constraints in accessing credit facilities from various financial institutions. The credit given to them is inadequate and extremely costly. One of the key factors required to encourage the SMEs is the availability of adequate capital which help in exploiting the opportunities and growth exponential..A large chunk of the companies on the EMERGE platform are reporting losses. But even after that its market turnover has improved in the recent year than that of its rival exchange. Moreover, share prices of the BSE SME companies are lower in general.

DATA ANALYSIS AIRAN LIMITED

Table-1: Performance of Airan Ltd

Particulars	Past	Present
Standard deviation	-	39.165
P/E Ratio	17.132	67.645
EPS	3.152	3.712

Standard deviation is high for the company which shows more volatility and risk. The P/E ratio is very high as it shows that the investor willing to pay 67.645 rupees to get Rs 1 return. It means that the stock is overpriced as EPS is comparatively lower. The other side is that investors are expecting higher earnings growth in the future. The EPS has increased marginally compared to past so the company may not doing well.

Table-2: EPS calculation of Airan Ltd

			Net income - Dividend / average outstanding shares of	
EPS			the company	
net income			total revenue-cogs-operating exp-interest exp-tax	
			26.88-21.37-2.63-0.9-0.53	
			1.45	
Dividend			0	
outstanding shares			.33	
opening price (14/3/2017)			54	
P/E Ratio(Past)			54/3.152	17.132
EPS			1.45/0.46	3.152
P/E Ratio (Present)				
net income			35.92-26.24-2.15-1.23-1.66	
			4.64	
Dividend			0	
outstanding shares			1.25	
Curent	Trading	Price		
	(30/6/2017)		251.1	
P/E Ratio			251.1/3.712	67.645
EPS			4.64/1.25	3.712

Data Source: Economic Times

SHRENIK LTD
Table-3: Performance of Shrenik Ltd

Particulars	Past	Present
Standard deviation	-	265.264
P/E Ratio	7.696	60.46
EPS	5.444	13.722

Standard deviation for the company is exceptionally high for the company which shows more volatility and risk. Even the returns are very high, nearly 1629% from opening is. The P/E ratio is very high as it shows that the investor willing to pay 60.46 rupees to get rs.1 return. It is doing bad compared to the past position. The other side is that investors are expecting higher earnings growth in the future. The EPS has increased at present compared to past may be due to higher returns as company is performing well

Table-4: EPS calculation of Shrenik Ltd

			Net income - Dividend / average outstanding shares of	
EPS			the company	
net income			total revenue-cogs-operating exp-interest exp-tax	
			329.46-318.29-0.29-6.35-1.59	
			2.94	
Dividend			0	
outstanding shares			.54	
opening price (18/7/2017)			41.90	
P/E Ratio(Past)			41.90/5.444	7.696
EPS			2.94/0.54	5.444
P/E Ratio (Present)				
net income			594.11-572-0.7-9.26-4.25	
			7.91	
Dividend			0.54	
outstanding shares			0.54	
Curent	Trading	Price		
(30/6/2017)			829.7	
P/E Ratio			829.7/13.722	60.46
EPS			7.41/.54	13.722

Source: Economic Times

ICICI LOMBARD GENERAL INSURANCE COMPANY LTD
Table-5: Performance of ICICI Lombard General Insurance Company Ltd

Particulars	Past	Present
Standard deviation	-	49.389
P/E Ratio	41.766	43.933
EPS	15.563	16.608

Standard deviation for the company is exceptionally low for the company which shows less volatility and risk. Even the returns are not very high, nearly 7.11% from opening is. The P/E ratio is good as it shows that the investor willing to pay 43.933 rupees to get rs.1 return. It is doing bad compared to the past position. The EPS has increased at present compared to past may be due to higher returns as company is performing well

Table-6: EPS calculation of ICICI Lombard General Insurance Company Ltd

			Net income - Dividend / average outstanding shares of	
EPS			the company	
net income			total revenue-cogs-operating exp-interest exp-tax	
			1018.49-108.39-208.22	

			701.88	
dividend			0	
outstanding shares			45.1	
opening price (27/9/2017)			650	
P/E Ratio(Past)			650/15.563	41.766
EPS			701.88/45.1	15.563
P/E Ratio (Present)				
net income			1337.75-141.51-334.46	
			861.78	
dividend			112.75	
outstanding shares			45.1	
curent	Trading	Price		
(30/6/2017)			729.65	
P/E Ratio			729.65/16.608	43.933
EPS			749.03/45.1	16.608

Source: Economic Times

PNB HOUSING FINANCE LTD

Table-7: Performance of PNB Housing Finance Ltd

Particulars	Past	Present
Standard deviation	-	146.54
P/E Ratio	33.433	27.578
EPS	25.813	41.16

Standard deviation for the company is exceptionally high for the company which shows more volatility and risk. The company has given a decent return of 31.53% since beginning. The P/E ratio has decreased to 27.578. It is doing well compared to the past position. The other side is that the company may be currently undervalued in the market. The EPS of the company has increased from 25.813 to 41.16. This may be due to the fact that the company is generating enough dividends for its shareholders.

Table-8: EPS calculation of PNB Housing Finance Ltd

			Net income - Dividend / average outstanding shares of	
EPS			the company	
net income			total revenue-cogs-operating exp-interest exp-tax	
			2699.54-319.94-15.04-1860.29-176.71	
			327.57	
Dividend			0	
outstanding shares			12.69	
opening price (28/10/2016)			863	
P/E Ratio(Past)			863/25.813	33.433
EPS			327.57/12.69	25.813
P/E Ratio (Present)				
net income			5516.95-682.96-24.11-3530.8-448.43	
			830.65	
Dividend			149.04	
outstanding shares			16.56	
curent	Trading	Price		
(08/06/2018)			1135.15	
P/E Ratio			1135.15/41.16	27.578
EPS			681.61/16.56	41.16

Source: Economic Times

OVERALL COMPARISON OF THE MAIN BOARD AND SME IPO COMPANIES**Table-9: Performance data of companies**

Particulars	P/E Ratio		EPS		
	Standard				
	deviation	Past	Present	Past	Present
Airan Ltd	39.165	17.132	67.645	3.152	3.712
Shrenik Ltd	265.264	7.696	60.46	5.444	13.722
ICICI Lombard General Insurance Company Ltd	49.389	41.766	43.933	15.563	16.608
PNB Housing Finance	146.54	33.433	27.578	25.813	41.16

Standard deviation for the MAIN BOARD IPOs is less compared to SME IPO, which shows less volatility and less risk and even they have given less returns compared to SME IPOs which are showing high risk and variance with high returns. The EPS for the MAIN BOARD IPOs is higher compared to the SME IPOs. Thus investors get more dividends by investing in main board IPOs than SME IPOs. The PE ratio is higher for the SME IPOs, thereby indicating that the MAIN BOARD IPOs are safer investment option as these companies are performing better. Also MAIN BOARD IPOs attract more bids from QIB's (Qualified Institutional Buyers) as they are lesser risky, whereas more retail investors invest tend to invest more in SME IPO to get higher return.

FINDINGS

After the study it was found out that the SME IPO's have been under-priced due to fact that they were oversubscribed. Also SME IPOs are riskier and more volatile, so they are not suggestible to risk adverse investors. The returns are higher in SME IPOs and high uncertainty too. The performance of the MSMEs has improved after listing in the SME Exchange. The improvement for MSME companies is much better compared to Mainboard companies. Investors are able to get more dividends by investing in Mainboard IPOs than SME IPOs as Mainboard companies are more stable than MSMEs in terms of their functioning.

SUGGESTIONS

A wise investor should grab the returns as early as possible, so the primary market is the best platform to get early returns. Also Investor needs to be aware of additional information, which reflects wider changes in share prices. The SMEs should be encouraged to go for equity funding as it helps in improving their performance. The listing norms for the SME's must be made more stringent and documents pertaining to the issue must be verified by the SEBI to ensure more information is available to investors. This will also help in increasing the participation of Institutional Investors in SME IPO's. The issues should be 100% underwritten to improve the liquidity.

CONCLUSIONS

SME companies have shown improved results after their listing. Hence more and more SMEs should be educated about listing in SME Exchange. Also primary market returns are high compared to stock market in the recent IPOs in India. SME companies are giving higher returns to investors compared to Mainboard companies. SME IPOs are more risky than Mainboard IPOs. So an investor should take wise decision in choosing the best company by doing fundamental analysis and checking market conditions and trends. Even though SME IPOs give lesser dividends to their investors but their return on investment is way higher compared to Mainboard companies. So it is an important avenue for angel investors, who want higher returns.

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FINANCIAL INCLUSION IN INDIA: A STUDY OF APPROACHES

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ABSTRACT

Purpose – Financial inclusion extends the banking habit among the less privileged in urban and rural areas. The main theme of this paper is to study the financial inclusion initiatives and measures and evaluate the Financial Inclusion indices based on financial inclusion indicators. Hence, this exploratory study seeks to highlight the issues and the challenges of financial inclusion

Design/Methodology – The paper adopts an integrative and an interpretive research methodology to explore their perceptions, prospects and problems connected with the financial inclusion approaches

Findings – The findings presented in this paper clearly illustrate the intensity of financial inclusion based on banking penetration and the usage of services

Originality/Value – The practicality of the research lies in the adaptation of the facts presented according to the needs of policy changes.

Keywords: Financial Inclusion, Inclusion Index, social inclusion, Financial exclusion, and Banking penetration.

INTRODUCTION

"In today's world we can progress as a civil society only when we have an inclusive approach and recognize each other's strengths." - Oscar Fernandes, Nelson Mandela Award Recipient

No doubt, India has been regarded as one of the growing economies of the world, because of its response to the need for inclusive growth, the Inclusive Growth, being a National Policy Objective of the Union Government. Inclusive growth includes two processes- the pace and the pattern of economic growth. The term "Inclusive" is not just an issue of target for developmental programmes, but it is a pace and a process of inclusion of the excluded who would serve as participative agents whose growth is imperative for the development processes of our country.

The significant areas for need of inclusive growth are : Reduction of unemployment rate, Decrease regional disparity, Income inequalities reduction, Development social sector, Development of agriculture, Abolition of poverty and Environmental Protection.

In order to reach the goal of inclusive growth, resources are inevitable and for resource generation, financial inclusion is vital.

Keeping in view the more than half of the population being under the poverty line, RBI uses the financial inclusion as the important tool to uplift the poor from the cycle of poverty as it has a potential through the provision of financial services. Access to finance, especially by the poor and vulnerable groups is a prerequisite for employment, economic growth, poverty reduction and social cohesion. Further, access to finance will empower the vulnerable groups by giving them an opportunity to have a bank account, to save and invest, to insure their homes or to partake of credit, thereby facilitating them to break the chain of poverty. Prolonged and persistent deprivation of banking services to a large segment of the population leads to a decline in investment and has the potential to fuel social tensions causing social exclusion. Recognizing this, the Eleventh Five Year Plan has explicitly stated 'inclusive growth' as its objective. Rural areas are the least favoured by microfinance whereas they show the highest concentration of population living below the poverty threshold (75% of the poor live in rural areas). Very often rural families have to diversify their production activities to survive. The providers of financial services follow this trend and offer diversified products and different approaches for different market segments. In fact, rural financing is more expensive because clients are more dispersed and there are higher risks related to certain agricultural activities.

Financial inclusion creates the culture of savings which is needed for the economic growth and also enhance the payment modes by strengthening the resources base of formal financial institutions which helps the Indian economy as resources will be available for credit and thus investments. Financial inclusion is the concept, strives to achieve the sustainable development of the country through financial institutions. The Rangarajan Committee (2008) has defined financial inclusion as the process of ensuring timely access to financial services

and adequate credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost. The process of financial inclusion consists of ensuring bank accounts to each household (Reddy, 2007) and access to financial services promotes social inclusion, and builds self-confidence and empowerment. And banking is a key driver for inclusive growth.

OBJECTIVES

- a. To the objectives, initiatives and measures of financial inclusion plan of India
- b. To identify the challenges of India's financial inclusion plan
- c. To evaluate Financial Inclusion Indices using the financial indicators

REVIEW OF LITERATURE

Honohan (2007) estimated the fraction of the adult population using formal financial intermediaries using the information on number of banking and MFI accounts for more than 160 countries, and then correlated with inequality (Gini Coefficient) and poverty. **Sarma and Paise (2008)** report that the financial inclusion is a development policy priority for the countries and concluded that income is positively associated with the level of financial inclusion among socio-economic factors and human development and financial inclusion in a country move closely with each other. **Michael Chibba (2009)** observed the noted that Financial Inclusion is an inclusive development and Poverty Reduction strategy that manifests itself as part of the emerging FI-PR-MDG nexus. However, given the current global crises, the need to scale-up Financial Inclusion is now perhaps more important as a complementary and incremental approach to work towards meeting the MDGs than at any other time in recent history. **Sarma (2008)** developed an Index for financial inclusion using aggregate banking variables like number of account, number of bank branches and total credit and deposit as proportion of GDP for 55 countries. **World Bank (2008, 2009)** set up task committees to deliberate financial inclusion and its scope. These studies highlighted the various issues of financial inclusion. However, the measurement of financial inclusion needs extensive coverage. **Mehrotra et al. (2009)** calculated an index for aggregate indicators financial inclusion data such as number of rural offices and rural deposit accounts, the volume of rural deposits and credit of banks of sixteen major India states. **Massey (2010)** reported that for every developing country, financial institutions are vital to promote financial inclusion and it can be deepened by the capital market players with their active participation in the national and international forums taking up responsibilities of inclusion. **Chattopadhyay (2011)** studied on the dimensions of financial inclusion in West Bengal and analysed the outreach of the banking sector, and found that the contribution is insignificant. **Oya Pinar Ardic et al (2011)** studied the deposit and loan services access and the retail networks, and the state of financial inclusion around the world. **Singh and Tandon (2012)** emphasized the goal of inclusive growth through major institutions like banks, Micro Finance Institutions, Policy makers, NGOs, Self Help Groups, and Government as a group to complement one another to achieve the goal. **Pal and Pal (2012)** reported formal financial services have not affected the gender of the urban household heads and social groups. **Shankar (2013)** studied a few microfinance institutions (MFIs) and ascertained that they have more flexible operating models to reach the unbanked. **Hameedu (2014)** observed that the banks need to evolve strategies to expand the base of its outreach to promote financial inclusion to meet the needs. **Avais (2014)** studied about the financial services and institutions available to the rural people. **Singh et.al (2014)** reported about the low financial inclusion in rural areas. The lack of financial knowledge and low income are the causes for low demand for financial services. He suggested for incentives to Business Correspondents, Post Office Networks and Fair Price Shops, ATMs, and Training and Financial Literacy. **Sharma and Kukreja (2013)** stated that the formal financial institutions need to trust of the disadvantaged by creating strong linkages to sustain the no-frill bank accounts. **Bansal (2014)** noted the role of technology in achieving Financial Inclusion in rural India, and concluded that main reason for slow inclusion is the absence of appropriate delivery model and products which satisfy the financial need of low income families. It appreciates the steps taken by the Central Government by adding new avenues in providing banking services to the unbanked population with the various technologies recently availed which include modern Information and communication technology (ICT) and linking banks accounts with National Unique identification, but until now we are not able to utilize these technologies up to their potential especially in rural areas. **Aggarwal (2014)** studied Financial Inclusion in India in comparison to 11 other developing countries by using secondary data from Financial Access Survey, World Bank for Number of bank branches, ATMs, Bank Deposits and Bank Credit as the factors that determines the degree of Financial Inclusion and found that India has mid- level Inclusive growth comparatively. The study further emphasis on literacy, poverty and advanced technology as the constraints to inclusive growth, but these alone may not assure high inclusive growth. Hence, there is a need to adopt multiple strategies like no-frill account, regional language usage, proximity to access the bank, simplification of KYC

norms, access to new saving schemes to improve financial inclusion. **Mukhopadhyay (2016)** used micro-data available from the with a nationally representative sample of 45,024 persons (aged 15 years and above) spread across 22 states in India. Results suggest there is significant need to expand and increase the accessibility to formal finance in general and more so in states like Uttar Pradesh, Uttarakhand and Himachal Pradesh. Also, there is mismatch between the ranking of the states done on the bases of demand-side information-based index and supply-side information-based index. Having bank account, higher education qualification and being male are positively correlated with the formal borrowings. **Chaudhry (2016)** reported about the states which have shown improvement in 2014. Using RBI and Census of India, suggested that financial inclusion and development is necessary for the vast majority of the population. **Iqbal and Sami (2017)** studied the importance of role of banks and highlighted how the limited knowledge, rigid terms, gender biasness and improper legal identity affect the financial inclusion results. The research points out that there has been insignificant improvement in terms of transactions despite the increment of large number of bank accounts during the period 2010 to 2013.

RESEARCH METHODOLOGY

The source of Data is Secondary in nature, collected from various research papers, journals, Reports by RBI, World Bank, CRISIL Inclusix report and IMF. The variables considered for study are Banking penetration, Banking Usage and Banking services.

DISCUSSION

Eradication of poverty and unequal distribution of income and wealth are the two twin goals of Independent India. No doubt, where there are goals set, challenges are there to be addressed with a strong base of networks for the creation of formal financial infrastructure covering whole of the nation, not leaving even the smallest village and the poorest sections of people. Hence, the focus of Reserve Bank of India (RBI) since the independence has been to develop a strong banking system that can economic development of the nation through its growth in terms of increased mobilization of resources. The whiff of Financial inclusion was first spread to a village 'Mangalam village' in 2005, where people enjoyed banking services with less relaxed Know Your Customer (KYC) norms and frills. But to maintain the control over the situation, RBI granted permission to commercial banks (CBs) to use the services of non-governmental organizations (NGOs) and Micro finance Institutions (MFIs).

The following paragraphs discuss about the various initiatives and measures undertaken by the RBI for the creation of financial inclusion infrastructure bearing in the structure creation, the following objectives:

A. OBJECTIVES

1. *Broad and Primary Objectives for Financial Inclusion:*

- To expand the organized financial system to include low income people.
- To increase the volume of credit to the poor that they come out of poverty
- To provide hassle free finances
- To create an broader based financial access leading to faster and equitable growth.
- To facilitate less vulnerability to poor households saving and managing their money

2. SECONDARY OBJECTIVES

- To provide priority loans to marginal and sub marginal farmers
- To lend simplified loans to small borrowers
- To advise on the agriculture related issues to the farmers
- To set up commercial bank branches commensurate with the size of population
- To fortify SHG-Bank Linkage Programme (BLP)
- To implement branchless banking using Business Correspondents and mobile technology

B. INITIATIVES

- advised all banks to open Basic Saving Bank Deposit (BSBD) accounts with minimum common facilities such as no minimum balance or no minimum balance
- simplified KYC norms to facilitate easy opening of bank accounts, especially for small accounts with balances not exceeding Rs. 50,000 and aggregate credits not exceeding Rs. one lakh a year.

- advised not to insist on opening bank accounts introduction of customers but to use Aadhar Card as a proof of both identity and address
- opening branches in Tier 2 to Tier 6 centers with population of less than 1 lakh
- opening Branches in Un-banked Villages, at least 25% of the total number of branches to be opened during the year in un-banked (Tier 5 and Tier 6) rural centers.
- Opening of brick and mortar structure, for effective cash management
- redressal of customer grievances and supervision
- advising the coordination between the present base branch and BC locations.
- Disaggregating the FIPs to involve the stakeholder in the financial inclusion efforts.
- revised guidelines on Financial Literacy Centres (FLCs) in 2012 to scale up financial literacy efforts through conduct of outdoor Financial Literacy Camps at least once a month,

C. PLANS FOR BANKS (2016-19)

There are various economic issues that hinder the process of financial inclusion and for instance, demand side, the reasons are lack of awareness and illiteracy. And from supply side, the reasons may be poor bank penetration, high cost or resistance to new policies. Hence, the third phase of financial inclusion started with FIP targets for banks, focusing on the granular monitoring on the performance at FIPs at district level.

1. Demand Side Intervention

- banks have opened about 440 million accounts under the scheme PMJDY focussing on enhancing capabilities that the individual is in a position but is also capable of demanding preferred products and services suitable to her need/choice.
- Setting up of Financial Literacy Centres (FLCs)/ Rural Self Employment Training Institutes, about 1380 FLCs are functional camps for five different target groups i.e. farmers, small entrepreneurs, SHGs, School students and senior citizens.
- Setting up of the Rural Self Employment Training Institutes (RSETIs) with a key objective of “Short term training and long term hand holding with assistance to credit linkage for trainees”.
- Offering new services such as Direct Benefit Transfer and Aadhaar Seeding of accounts to receive direct entitlements under various state sponsored schemes to encourage saving habit among the poor.

WAY FORWARD

The approaches adopted by the Banks to attract consumers for formal financial services:

3 Ps – Products, Processes and People

a) Suitable Products- the new products prevent mis-selling of financial products to the newly inducted ones with more concentration. However, it is ensured that overzealousness does not result in over-indebtedness.

b) Transparent Processes: an objective communication about the products and procedures, are necessary in documentation while making a financial transaction, resulting in greater trust and confidence.

c) Committed People- people who empathize with the consumers willing to listen are important alongside the suitable products, and the transparent processes

The 3Ps strategy is important along with a focus on 3x3x3 matrix and it refers to three sections of the society, with three kinds of surpluses and the three types of institutions

THE THREE SECTION APPROACH - IMPROVING CREDIT ABSORPTION CAPACITY

The inclusive growth in India takes the base of three sections of people. i) the small and marginal farmers, share croppers, ii) micro and small industries and iii) the low salary earners in the unorganized sectors.

The land reforms of consolidation of fragmented landholdings under Self Help Group format enhances the credit absorption capacity of **the farmers**, and it must be supplemented through financial literacy and vocational training initiatives and insurance covers over failure of crops.

Enhancing the financial capabilities of **micro and small entrepreneurs** with the necessary skill development initiatives, and need to be served with relevant low cost products employing innovative credit scoring models.

Encouraging entrepreneurship through new national skill development with integrated formal vocational education among low salary earners in the unorganized sector.

THE THREE SURPLUSES APPROACH - SUITABILITY IN PRODUCTS AND SERVICES

The **first category** generates adequate surpluses should be sensitized to reach their financial goals like investing on shares, mutual funds, bonds, etc. The **second category** will prefer products like recurring deposits, SIPs etc. The **third category** people who do not generate even any meagre income and the reach to them is the need of the day through the products like BSBD for daily transactions, insurance and pension products with banking services like electronic remittance channels, insurance and pension products.

THE THREE INSTITUTIONS APPROACH – ENDLESS OPPORTUNITIES

The institutions which bring people in the formal financial sector is called as “Existing & Included”, must ensure 3Ps. There are NBFCs and MFIs which come under the second category are referred to as “Existing, but not included” in a structured way to ensure last mile reach. The

Three Small Finance Banks have started the operations to guide and support technology backed last mile to serve the customers.

DIMENSIONS FOR MEASURING FINANCIAL INCLUSION

The approach suggested by Sarma (2008) is similar to that used by UNDP for computation of some well known development indexes such as the HDI, the HPI, etc. As in the case of these indexes, IFI is computed by first calculating a dimension index for each dimension of financial inclusion. The dimension index for the i th dimension, d_i , is computed by the following formula.

$$d_i = \frac{A_i - m_i}{M_i - m_i}$$

Where A_i = Actual value of dimension i ; m_i = minimum value of dimension i ; M_i = maximum value of dimension i

Formula (1) ensures that $0 \leq d_i \leq 1$. Higher the value of d_i , higher the country's achievement in dimension i . If n dimensions of financial inclusion are considered, then, a country i will be represented by a point $D_i = (d_1, d_2, d_3, \dots, d_n)$ on the n dimensional Cartesian space. In the n -dimensional space, the point $O = (0,0,0,\dots,0)$ represents the point indicating the worst situation while the point $I = (1,1,1,\dots,1)$ represents the highest achievement in all dimensions. The index of financial inclusion, IFI_i for the i th country, then, is measured by the normalized inverse Euclidean distance of the point D_i from the ideal point $I = (1,1,1,\dots,1)$. The exact formula is

$$IFI_i = 1 - \frac{\sqrt{(1-d_1)^2 + (1-d_2)^2 + \dots + (1-d_n)^2}}{\sqrt{n}}$$

Using the data for penetration, availability and usage for India for the period from 2010 to 2017. IFI values have been calculated. The values are presented in the Table 1 and 2

The following values of IFI, the categorization has been done:

1. $0.5 < IFI \leq 1$: high financial inclusion
2. $0.3 \leq IFI < 0.5$: medium financial inclusion
3. $0 \leq IFI < 0.3$: low financial inclusion

Generally, in the index of financial inclusion, three basic dimensions of an inclusive financial system considered are: 1. banking penetration (BP), 2. availability of the banking services (BS) and 3. usage of the banking system (BU).

(i)Banking penetration: The size of the “banked” population, i.e. number of people having a bank account is a measure of the banking penetration of the system. In the absence of the data on “banked” population, we use number of bank accounts as a proportion of the total population as an indicator of this dimension.

(ii)Availability of banking services. Availability of services can be indicated by the number of bank outlets (per 1000 population) and/or by the number of ATM per 1000 people. In the absence of comparable data on the

number of ATMs, we use the number of bank branches per 1000 population to measure the availability dimension.

(iii) *Usage*. This dimension is motivated by the notion of “under banked” or “marginally banked” people. Accordingly, the volume of credit and deposit as proportion of the country’s GDP has been used to measure this dimension. Thus, considering the above three dimensions –penetration, availability and usage– we can represent a country i by a point (p_i, a_i, u_i) in the three dimensional Cartesian space, such that $0 \leq p_i, a_i, u_i \leq 1$, where p_i , a_i and u_i denote the dimension indexes for country i computed using formula (1).

Table 1: Important Indicators of Financial Inclusion

year	Banking Outlets in Villages - Branches	BSBDA Total (in million)	Deposit accounts with commercial banks per 1,000 adults	Automated Teller Machines (ATM'S) per 1,00,000 adults	Outstanding deposits with commercial banks (% of GDP)	Branches of commercial banks per 100,000 adults
	D1	D2	D3	D4	D5	D6
2010	0	0	0	0	0	0
2011	0.078	0.067	7.27	0.106	0.34	0.1
2012	0.22	0.14	8.85	0.25	0.19	0.23
2013	0.4	0.23	10.99	0.37	0.55	0.37
2014	0.07	0.36	12.87	0.71	0.93	0.57
2015	0.87	0.7	17.8	0.83	1.21	0.72
2016	1	0.85	19.7	0.94	0.69	0.84
2017	0.94	0.99	21.24	1	0.99	1

Source: calculated from IMF Financial Survey

Table 2: Indicators for FI indices

	Banking penetration	Banking services	Banking usage		
YEAR	Deposit accounts with commercial banks per 1,000 adults	Automated Teller Machines(ATM'S) per 1,00,000 adults	Outstanding deposits with commercial banks (% of GDP)	IFI	
	D3	D4	D5		
2010	0	0	0	0.42265	MEDIUM
2011	7.27	0.106	0.34	0.618949	HIGH
2012	8.85	0.25	0.19	0.532346	HIGH
2013	10.99	0.37	0.55	0.740192	HIGH
2014	12.87	0.71	0.93	0.959585	HIGH
2015	17.8	0.83	1.21	0.878756	HIGH
2016	19.7	0.94	0.69	0.821021	HIGH
2017	21.24	1	0.99	0.994226	HIGH

Source: calculated from IMF Financial Survey

E. CHALLENGES

Financial exclusion bears higher cost than the financial inclusion, but on a common platform of co-ordination and collaborations, the unbanked can be brought to the banked field with great benefits eliminating the exclusion cost. The financial inclusion expands the savings base of an economy resulting supporting the process of development, by creating a new investments base for the existing and new firms. Also the poor households can avoid middlemen for their current disposal of income.

From the macroeconomic point of view of developmental economics, a strong financial system creates positive impact on a country’s growth over a longer period of time. So since, financial inclusion is found to be a more challenging task, it is influenced by three major Factors – *Financial education, Technology, Counselling*. Once these factors are properly implemented and executed in every village in support from the government and society, then this can really lift the standard of living of majority of the poor.

THE PLANS AND PROSPECTS OF THE FUTURE

The RBI's financial inclusion plan (2016-2019) is in vogue now started with an objective of opening banking outlets in every village with a minimum population of 2,000. The Pradhan Mantri Jan Dhan Yojana (PMJDY) was launched in August 2014 and being implemented in two phases August 2014 and in August 2018.

Providing universal access to banks was the first aim till 2015, and Rupay debit card with an insurance cover of Rs.1,00,000. The direct benefit transfer under Jan Dhan account are in practice but restricted to 23%.

The population size in the total formal financial system has more than doubled since 2011 and the banking coverage is 80%. Jan dhan account holders were extended Credit Guarantee Fund as overdraft facility and micro insurance for small businesses and pension schemes

The total number of accounts opened under the PMJDY expanded to 32.8 crore with Rs.85,100 crore deposits as on 28th September 2018, of which 59% were from rural and semi-urban centres.

PROBLEMS IN APPROACHES

In spite of the Government, RBI, commercial banks, financial institutions, many NGOs which are private in nature, are taking various steps in achieving inclusive growth and finance to uplift unbanked, through awareness camps as social service programmes. For banks, the major competitors were MFIs, and they were not successful till 2007. Because the low cost was possible upto a certain threshold, beyond which the constraints make it mandatory to use the intermediary services of Business correspondents (BCs) and Business facilitators (BFs).

This model encourages many existing institutions in the field of financial services to join commercial banks to offer basic saving and other financial services. In this process of expansion of branch networks, non-profit MFIs, cooperative societies, NGOs, self-help groups and civil society organizations join commercial in the creation of people and services infrastructure, while BF's would help in the linking and opening of bank accounts by the unbanked and the BCs, apart from facilitation, engage in the banking businesses.

However, MFIs offer other services to improve the ability to employ financial services, there are two types of arguments that we can see here, guided by two radically different theories:

- a. A minimalist approach considers that the fact of creating a microfinance institution increases access to sustainable financial services through the granting of new or existent services at a lower price for the borrower/ saver. Therefore, there is an immediate social impact. In fact, reducing the borrower's/saver's financial fees liberates an income that can be used for a different purpose (food, health, education...).
- b. According to the second approach, that we define as maximalist approach the improvement of the social situation can be measured in obvious improvements in the fields of health, education and culture or through the participation in the process of democratic representation.

The major objective of minimalist approach is to solve the problem of unemployment in and also the growth of micro enterprises by supplying financial products. There is much debate about whether an MFI should be minimalist (i.e., offer only financial services) or integrated, as to the expansion cost and profitability implications for the MFIs and the banks. It would also have pricing and affordability implications for the borrowers from the sector.

Responding to macro-regulatory imperatives for market-driven development, the minimalist approach pares down microfinance to the strictly financial dimensions of poverty alleviation (credit, savings, and increasingly insurance and other financial instruments). Under the minimalist approach, social problems (ex: drug, misuse, crime, poverty) are attributed to moral weakness in the individuals, families or communities that have them. The wider social and economic system is not to blame, because capitalism and individual liberty are prized social values. Hence, the socially excluded are excluded, in a sense, by themselves, because they cut themselves off from mainstream society by their own behaviour and their refusal to accept mainstream social values of employment, saving, marriage. Minimalist approach is in contrast with the European social model: one is concerned with reducing poverty and hardship and to preserve social cohesion and the other focuses on higher standards for all. The risk of this "minimalist" approach is that borrowers will consume rather than invest their capital.

Financial inclusion when promoted in a wider context of economic inclusion can uplift financial condition and improve the standard of living of the underprivileged. Availability of financial services to the poor has positive social impact, therefore enhancing nutrition, health, education, status of women in the society, etc. Financial inclusion imparts formal identity, provides access to payment system and brings poor people into savings and

safety net. Hence, financial inclusion is considered to be critical for achieving inclusive growth of Indian economy.

Microcredit refers to provision of micro-loans for micro-enterprise development, where as microfinance (MF) refers to the provision of financial services - micro-loans, savings, insurance or transfer services - to low income households. It is widely seen as improving livelihoods, reducing vulnerability and fostering social as well as economic empowerment. All over the world, MF is recognized as an effective tool in fighting social and financial poverty, because it enables those excluded from the classic financial sector to obtain micro-credits which help them in their daily lives, allowing them to embark on productive activities and easing the growth of small businesses. Hence we can say that financial inclusion through MF will lead to social inclusion.

In the European context, microcredit, the provision of loans for micro-enterprise development, predominates. In this context, microcredit is one part of the micro-enterprise development agenda as it refers to provision of micro-loans for micro-enterprises. The Report on "From Financial Inclusion to Social Inclusion" focuses on microcredit and business creation as a tool for social and financial inclusion. One may make the mistake of assuming that MF is merely a tool for tackling unemployment, instead of considering it as across-the-board approach in support of social inclusion.

Hence, the government may consider to work on the following challenges in order to attain maximum financial inclusion for a maximalist approaches as under with a strong drive:

- Bank-Branch delivery model to cater to the needs of all
- Leveraged technology
- Appropriate business model yet to evolve
- BC model prevalence
- Limitation of cash delivery points
- Comprehensive Participation of All Stakeholders

CONCLUSION

Enabling access to a greater number of the population to the structured and organised financial system has explicitly been on the agenda of the Reserve Bank since 2004. Social safety networks simultaneously boost financial inclusion when benefits are delivered through basic bank accounts in the formal financial sector. The above discussed cross country experiences show that there has been several innovative experiments worldwide to promote financial inclusion with special emphasis on creating demand through diversified credit instruments, outreach considerations, sustainability aspects, delivery mechanisms among others. The above research points to the importance of financial inclusion and highlights various policies that have been adopted in India to increase the same. Notwithstanding the regulatory, operational and other aspects in focus, financial inclusion is a complex issue which cannot be solved alone by any actors in the system. Compared to the European world, the coverage of our financial services is quite low. For instance, as per a recent survey commissioned by British Bankers' Association, 92 to 94% of the population of UK has either current or savings bank account.

The subsequent analysis of the Performance of Indian Policies shows that the government has still a long way to go. Though there has been increased penetration of financial inclusion, there are a large percent of rural population who either do not have a bank account or have a dead-account. Awareness of inclusion policies and revised KYC (know-your-client) procedures will motivate the excluded to willingly contribute themselves towards financial inclusion. Banks on the other hand should deploy financial services through customer-centric technology and delivery channels to serve customers better. Banks should also equip their customers to use technology so that they would benefit from Information Technology applied in banking. It is important for banks to attempt to strike a balance between minimalist and integrated or social approach in offering services. This is for the simple reason that purely deployment of finances will not bring about social upgradation of lifestyles but proper utilization of the resources will.

Therefore, the banks and ABI are active to these purposes, with the awareness that the different measures aimed at reducing the distance between the new clientele and the banks are useful and necessary, and require: from the issuing side, and with a watchful eye on management inexpensiveness, the promotion and development of a greater interest of the banks in such clientele segments, in order to increase the range of microfinance services and dedicated products to come up to the new expectations. On the demand side, it is equally important to develop the promotion of financial education initiatives among the various categories to "be included": this can be done both through agreements with strategic partners recognized by new reference targets, in order to

promote as well a greater predisposition towards the use of banking services; and through the development of contacts with territorial networks (for example, provinces, regions, municipalities) involved in the territorial dynamics typical of specific targets (for example, the immigrants).

FURTHER RESEARCH DIRECTIONS

The earlier work focused on how finance helps an economy. Now, study shows that financial inclusion is important because the new avenue of research in finance is - making financial inclusion workable.. It is not implied that financial inclusion alone has led to the development but is an important factor.

Further research is also needed in the following fields:

- **Key barriers to access:** at the strategic level, systematic diagnostic efforts to identify “binding constraints” to financial access will help policymakers set priorities for action.
- **Randomized controlled trials (RCT):** more effective incorporation of RCT into regulatory decision making will allow for a deeper understanding of the impacts of specific products or services, and should be used more systematically to obtain insights into the appropriate sequencing of reforms.
- **Data and evidence:** updated information on levels and trends of financial inclusion is a critical step toward evidence-based policy decisions. Data collection must be tailored to objectives and available resources. Policymakers should expand collaboration with local researchers to build capacity for the collection of demand-side data.
- **Risk:** greater risk analysis of the scaling-up of technology-based financial inclusion policies with respect to financial stability is necessary to fill critical knowledge gaps due to rapid recent innovation.

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APPENDIX 1.:FINANCIAL INCLUSION SCHEMES IN INDIA

FINANCIAL INCLUSION SCHEMES

Pradhan Mantri Jan Dhan Yojana (PMJDY)
 Atal Pension Yojana (APY)
 Pradhan Mantri Vaya Vandana Yojana
 Stand Up India Scheme
 Pradhan Mantri Mudra Yojana
 Pradhan Mantri Suraksha Bima Yojana (PMSBY)
 Sukanya Samridhi Yojana
 Jeevan Suraksha Bandhan Yojana
 Credit Enhancement Guarantee Scheme (CEGS) for Scheduled Castes (SCs)
 Venture Capital Fund for Scheduled Castes under the Social Sector Initiatives
 Varishtha Pension Bima Yojana (VPBY)

APPENDIX II: OBJECTIVES OF FINANCIAL INCLUSION

- Helps to secure financial services and products at economical prices such as deposits, fund transfer services, loans, insurance, payment services, etc.
 - Aims to establish proper financial institutions to cater to the needs of the poor people.
 - Aims to build and maintain financial sustainability
- Intends to increase awareness about the benefits of financial services among the economically underprivileged sections of the society.
 - Intends to improve financial literacy and financial awareness in the nation.
- Aims to bring in digital financial solutions for the economically underprivileged people of the nation.
- Intends to bring in mobile banking or financial services in order to reach the poorest people living in extremely remote areas of the country.
- Agencies under the drive focus on improving the access to receiving government-approved documents such as PAN, Aadhaar, Driver's License, or Electoral ID.

Indicator	Measurement
(i) Bank accounts per adult	Number of bank accounts per adult
(ii) Geographic branch penetration	Number of branches per 1000 km ²
(iii) Demographic branch penetration	Number of bank branches per 1,00,000 people
(iv) Geographic ATM penetration	Number of bank ATMs per 1000 km ²
(v) Demographic ATM penetration	Number of bank ATMs per 1,00,000 people
(vi) Demographic Loan penetration	Number of loans per 1,00,000 people
(vii) Loan-income ratio	Average size of loan to GDP per capita
(viii) Demographic deposit penetration	Number of deposits per 1,00,000 people
(ix) Deposit-income ratio (or deposit-GDP Ratio)	Average size of Deposits to GDP per capita (or total bank deposits to GDP)
(x) Cash-Deposit Ratio	Cash in circulation to total bank deposits

Source: Conrad, et al. (2008)

THE NEED OF INNOVATIVE HUMAN RESOURCE PRACTICES (IHRP) IN PRESENT VUCA (VOLATILITY, UNCERTAINTY, COMPLEXITY, AMBIGUITY) WORLD

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INTRODUCTION

In Previous Human Resource management is simply executing some standard set of practices. But now there should be some need of developing and implementing new and improved HR practices to remain competitive. Tannenbaum and Duperee (1994) is also found a very strong relationship between external environment and HR Innovations. A favorable external environment reduces chances to improve HR innovations. According to Hiltrop(1996) these results does not prove that innovative or progressive HR practices cause better financial performance.

What is HR innovation?

HR innovation is the implementation of new ideas, methods, and technologies to better meet the ever-evolving requirements of the organization and its workforce. It's about anticipating future needs and circumstances rather than simply finding a response to a changing present situation.

Innovation is an evolutionary process of creating and implementing a new idea. It begins from the desire to test new things and will continue till the implementation of new idea. In today's competitive scenario, business organization need to focus on innovation to offer innovative products/services at attain maximum profits and to keep both employees and customers satisfied.

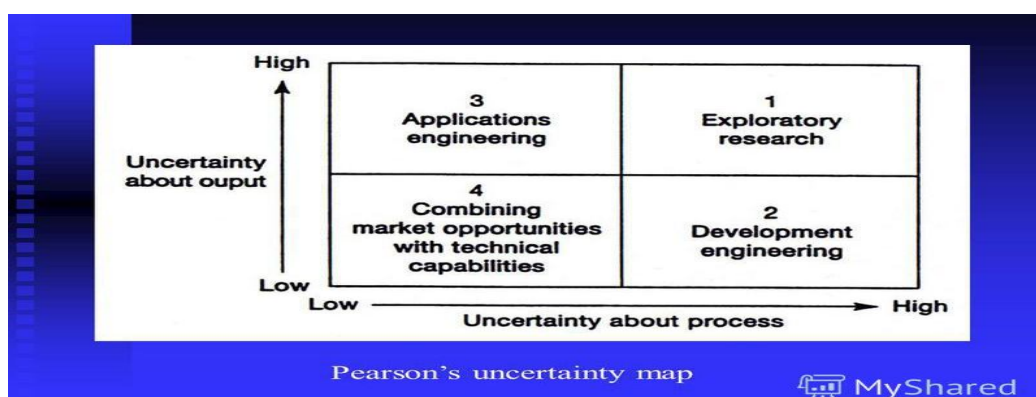
Kossek (1987) offered six propositions that identify factors associated with the adoption of innovative HRM practices: 1 external environmental forces distinguish HRM innovations across industries; 2 structural organizational characteristics may be related to HRM innovations; 3 HRM innovations that are easily packaged and marketed by consultants may be the most widely diffused; 4 organizations often adopt HRM innovations in order to appear more legitimate; 5 strong culture firms may adopt HRM innovations for different reasons than weak culture firms;

Finally, a company's history of success with past HRM innovations affects the prospects for acceptance of new ones. Kossek concluded that companies adopted new work practices for a variety of, often contradictory, reasons.

A general trend in literature was the recognition of the need to introduce innovations in HR practices that would be more relevant to the changing realities (Towers-Perrin, 1992; Rao, 1994; Ulrich, 1989; Sivasubramaniam and Venkataratnam, 1998). Ulrich (1997) concluded that HR, as we have known it, needs to change and that, if HR does not meet the challenge of change, it risks being disbanded. Though the traditional HR practices will not go away, they will become the table stakes for HR, with new practices merging constantly.

In research literature, 'innovative HR practices' were found to be referred to by several other terms too. each having the same connotation. Some of the terms used interchangeably with the term 'innovative HR practices' (Arthur, 1994; Camuffo, 1993; MacDuffie, 1995) were: high commitment practices (Pfeffer, 1994); progressive HR practices (Kravetz, 1988; Huselid, 1995); quality HR (Huselid, 1994).

And also, The Pearson map helps managers to consider how ideas are transformed into innovations; a very simplistic view of the innovation process. Moreover, it provides a way of identifying the different management skills required.



How Can the Uncertainty Map Help Managers Easy

Pearson's uncertainty map provides a framework for analyzing and understanding uncertainty in the innovation process. It addresses the nature of the uncertainty and the way it changes over time, and provides managers with knowledge to make a decision and transform ideas into innovation. It also determines the type of management skills needed for different degrees of uncertainty.

The framework separates uncertainty into four quadrants based on basic characterizations:

- a. uncertainty about ends – the eventual target of the project
- b. uncertainty about means – how to achieve the target

Drawn on two axes, uncertainty about ends appears on the vertical axis, about means on the horizontal. The axes then divide producing four quadrants, namely:

– Quadrant 1, also known as exploratory or Blue Sky Research is where there is no clear definition of the target or the means. Here, the organization is experimenting with unfamiliar technologies, and unidentified markets or products. Depending on the manager, ideas and developments may be immediately recognizable as possible commercial products. A technical manager may understand a technology but a commercial manager might see a wide range of commercial opportunities.

– Quadrant 2 bears the label, Developmental Engineering. It contains ongoing activity within say, manufacturing companies that continually examine production processes looking for inefficiencies and ways to reduce costs. Here the target is clear but means are unidentified. The company may start several different projects centered on different technologies or approaches along the way so there is considerable uncertainty about how to reach the target. A manager will require special project management skills here to ensure either project delivery within budget, or cancellation to avoid escalating costs.

– Quadrant 3 is the Applications Engineering dimension in which there is somewhat more certainty about how the business will achieve the target, but less certainty regarding the ends. Here they explore the potential uses of known technology, and management efforts center on which markets to enter, as well as discovering how to use the technology most effectively.

– Quadrant 4 is the dimension with the most certainty. Activities here center mostly on improving existing products or creating new products through a combination of market opportunity and technical capability. This is where companies use innovation to develop new product designs that use minimal and new technology, but dramatically improve appearance and performance. Managers have to make timely decisions because while certainty is highest for them, so it is for the competition. This is where a company can win or lose the race to be first to market, and commercial managers become excited because the project is close to market with minimal technical newness.

Many companies invest heavily to improve the customer experience but sideline employees who are responsible for delivering that experience. **What some organizations forget is that their employees are their first and most important customers** (internal). They use your tools and systems and they know firsthand about your culture. If your employees don't believe in your business, the quality of their work will be poor. Business success starts with the employee experience. When employees are happy (feel valued, welcome, respected, heard), they will create remarkable experiences for your external customers. **Your employees are your greatest brand advocates.** You can't expect stellar customer service from employees who feel distrusted and discounted. Successful businesses focus on creating memorable employee experiences to keep their staff engaged and happy.

In 2015, *Airbnb* announced that they were appointing a **Global Head of Employee Experience**. The following year, the company topped Glassdoor's list of the 50 Best Places to Work. Instead of following the traditional business model, Airbnb creates change and empowers employees at all levels, which has a huge effect on the success of the company, both monetarily and culturally. Always be quick to recognize and reward the efforts and contributions of employees. Nothing says we value you like showing how much you appreciate them.

OBJECTIVE

The primary purpose of the present field study is to know the relationship between Innovative HR practices (IHRP) and Organizational Commitment (OC) as OC is an ultimate outcome for HRM. The study focused on the perception of IHRPs along the following two dimensions;

1. Extent to which managers believed that innovative HR practices were important for achieving the goals of the organization.

2. Extent to which the managers were satisfied with the implementation of innovative HR practices in the organization.

The tentative hypothesis formulated for the study stated that there will be a significant relationship between one or more dimensions of employee perception.

Twenty-one HR experts from across industry were interviewed in-depth during this phase. The purpose was to understand the use of the term innovative in the context of human resource practices, to identify HR practices to focus upon, to obtain examples of innovative practices in Phase - one and to select the Questionnaire & sample for phase - two.

In Phase-One, Personally conducted the interviews. The duration of the interviews ranged from 45 minutes to 2 hours, with the average being 82.5 minutes. A summary of the demographic information about the experts interviewed during the preliminary investigation is presented in below Table.

Summary of demographic profile of experts interviewed in preliminary investigation.

S.No	Managerial Hierarchy	No.of experts	Experience(Yrs)	Type.of organization	No.of experts
1	Top Level	16	>30 Years	Private Sector	08
2	Senior Level	01	21-30 Years	Public Sector	07
3	Middle Level	04	11-20 Years	Consultants	04
4	Front Level	00	01-10 Years	Academicians	02
Total		21			21

Based on the opinion of experts interviewed, it emerged that the term 'innovative human resource practices' refers to a modification in the existing or established human resource practices of the organization, which is new to the organization as well as improved, even if the modification is by way of adopting or adapting the human resource practices of other organizations. It is this meaning of the term IHRPs that has been adopted in the present study.

Fourteen HR systems/practices Innovative HR practices identified by the experts, which covered the whole gamut from **employee recruitment to employee exit**, were focused upon in phase two of the study. Each HR practice selected for the study was labeled as an 'HR practice category'. The fourteen HR practice categories were,

- 1 .Employee acquisition strategies
- 2 .Employee retention strategies
- 3 .Compensation and incentives
4. Benefits and service
5. Rewards and recognition
6. Technical training
7. Management development
8. Career planning and development practices
9. Performance appraisals
10. Potential development
11. Succession planning
12. Employee relations with a human face
13. Employee exit and separation management
14. Adopting responsibility for socially relevant issues

The panel of experts interviewed was also requested to generate examples of HR practices/activities that could be termed as innovative for each of the HR practice categories. Tannenbaum and Dupuree-Bruno (1994), in

their study of innovative HR practices had followed the same method for generating a list of innovative/progressive HR practices.

In the second phase of the study, questionnaire data were collected at all participating organizations selected on the basis of the preliminary investigation. The Perception of Innovative HR Practices Questionnaire and Organizational Commitment Questionnaire were personally administered to the executives and managers of these organizations. A brief description of these questionnaires is provided below.

Each part of the questionnaire used a 4-point rating scale with 1 indicating a poor perception and 4 indicating a good perception for each dimension of innovative HR practice.

Organizational Commitment Questionnaire (OCQ) The OCQ was developed by Porter and Smith (1970). This questionnaire consists of fifteen items, six of which are negatively phrased and hence, reverse scored. The scale has been used extensively in research and has acceptable psychometric properties (Allen and Meyer, 1990). Reliability and validity evidence for the scale is highly positive. Coefficient alpha has been found to be consistently high in all the studies that have used the scale and ranges from 0.82 to 0.93 with a median of 0.90.

The sample comprised 422 executives and managers from across the seven organizations that participated in phase two of the study. The majority of the respondents were in the age group 25-35 years {n = 242, 57.35 per cent}.

And at the middle management level in the organizational hierarchy {n = 288, 68.25 per cent}.

Only thirty-nine of the 422 respondents were at the senior managerial level. And only two each were at the top management level and over 55 years of age.

Mean And SD of the Variables:

Organization(N) N=422	Introduction	Importance	Satisfaction	Organizational Commitment(Variable)
Mean	34.46	48.23	39.48	56.45
SD	7.55	6.65	7.88	7.36

It summarizes the mean scores for each of the three dimensions of IHRPs and for organizational commitment. The mean values of the variables indicated that the respondents of the seven organizations believed that innovations in HR practices were important for achieving the goals of these organizations to a moderately high extent (mean = 48.23). However, the perception of the extent to which HR innovations had been introduced these organizations (mean = 34.46) and level of satisfaction with the implementation of IHRPs (mean = 39.48) was lower. Mean score of 56.45 for OC indicated that commitment in these organizations was moderately high.

CONCLUSION

The findings reveal that the subject companies are extensively implementing various innovative practices related to HRM functions that enhance employee job involvement and organizational commitment. New economic realities have put pressure on the human resource function to demonstrate how it can add value to the firm's bottom line. Early conceptualizations often questioned the function's relevance to organizational effectiveness, mainly for the fact HR was seen to hold a primarily a reactive, administrative role. This research truly reflects the wide scope of innovative HR practice (from functional activities to wide ranging strategic initiatives) as well as its capability to affect the entire social structure of an organization. IHRP is now recognized as an important tool of increasing the organizational efficiency and performance all over the world, particularly in advance economies by adopting new HR practices. IHRP plays a crucial role in improving the employee performance as well as firm's performance. Still there are mixed evidences about the IHRP and HR outcomes. And there needed a more importance of IHRP not only for some firms but also in every firms. HRM functions related to employee relations, training and development, and recruitment and selection are found to be significant determinants of job involvement. On the other hand, HRM functions related to employee relations, recruitment and selection, performance management, and compensation are found to be significant factors of organizational commitment. Employee relations proved to be the most significant predictor of employee job involvement and organizational commitment. The values of integrity, trust, empowerment, employee and leader development and learning as being essential in the new normal of VUCA. The biggest thing we can try to shape is the culture in the organization. "Getting the right culture, setting the right tone, demonstrating... that is the way we need to do things in VUCA world.

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IMPACT OF MANAGERIAL AND ORGANIZATIONAL UNCERTAINTIES ON WORK LIFE BALANCE

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INTRODUCTION

In the present world of business environment, uncertainties and complexities have become so common rather than exceptional. Wherever there is a lack of well-established organizational culture, there is a scope for managerial and organizational uncertainties.

Managerial and organizational uncertainties can impact so many aspects of organizational functions and decision making in particular.

My topic seeks to unravel the relationship between organizational and managerial uncertainties and their impact on worklifebalance.

WORKLIFEBALANCE DEFINITION

Work life balance is a method which helps employees of an organization to balance their personal and professional lives. Work life balance encourages employees to divide their time on the basis of priorities and maintain a balance by devoting time to family, health, vacations etc along with making a career, business travel etc. It is an important concept in the world of business as it helps to motivate the employees and increases their loyalty towards the company.

There are certain managerial and organizational aspects which have implications for worklifebalance. If uncertainties on such aspects are identified they will impact the work life balance adversely.

My paper seeks to exactly know how those aspects impact worklifebalance with a view to shed the light for managers to take measures to reduce the organizational uncertainties having implications for worklifebalance. I hope the findings of my study will contribute to managerial decision making besides adding insights to theoretical knowledge in that topical area.

NEED FOR THE STUDY

It is suspected that, at IT industry employing both men and women is a unique nature of organisation dealing with clients projects with a rigid completion of schedules which are giving scope to Worklife imbalances to the employees. Therefore I have taken up this study for my exploratory research.

LITERATURE REVIEW

Many Managers and Organisations actively try to avoid uncertainty, some merely tolerate it, while few actively embrace it. As many organizations operate in a complex, confusing, and ambiguous environments, ignoring uncertainty creates an organizational problem. Leaders can no longer ignore uncertainty and assume their organizations operate in stable environments. The Managers as Leaders should consider all the uncertainties as challenges. The emerging global marketplace and the growing power of the Internet are just two of the many factors threatening the traditional organizational thinking that focuses on making detailed plans, clearly defining job responsibilities, and meeting carefully established objectives. By the late 1970s, researchers estimated the typical organization experienced a significant change at least every four or five years (Kotter & Schlesinger, 1979). Today, the rate of change has accelerated so that organizations are experiencing sequential as well as simultaneous change.

In fact, many business experts routinely advise organizational leaders to “avoid weasel words” and “use definitive language”. Indeed, a recent analysis of the public discourse used by Fortune 500 companies demonstrated that leaders heeded this advice in both good and bad times (Ober, Zhao, Davis, & Alexander, 1999). Ironically, skillful executives also can use definitive language to discuss the underlying confusions, ambiguities, paradoxes, and mysteries organizations face (e.g., “I don’t know”, “We don’t understand this yet”). By following this, the organisational and managerial uncertainties can be avoided to some extent and is helpful in balancing the worklife.

Therefore, the focus of our research is on understanding how managers and organizations manage the uncertainty. What strategies do managers and organizations use to manage uncertainty? What are the consequences of those strategies? How are managers and organizations strategies related? Answering these questions is the long-term aim of this research endeavour.

First, uncertainty is the inherent state of nature. The second law of thermodynamics states that the “entropy of a system increases as the system undergoes a 4 spontaneous change” (Rossini, 1950, p. 68). Physicists explain the essentially chaotic and random behaviour of gases with this law (Atkins, 1984). In short, the spirit of uncertainty pervades the scientific literature and culture.

Transforming the sentiments of the hard to the soft sciences is as natural as it is challenging. Natural because most social scientists and organizational theorists accept the fact that the world is chaotic, contradictory, and incompletely apprehended. For example, Kahneman, Slovic, and Tversky's (1982) noteworthy research regarding decision-making under conditions of uncertainty, begins with the following premise: Uncertainty is a fact with which all forms of life must be prepared to contend. At all levels, action must be taken before uncertainty is resolved, and a proper balance must be achieved between a high level of specific readiness for the events that are most likely to occur and a general ability to respond appropriately when the unexpected scenario happens.

Initially some social psychologists hypothesized that “tolerance for uncertainty” was a personality trait. Today the consensus seems to be that “tolerance for uncertainty” is more of a cognitive and/or emotional orientation (Furnham, 1995). “Tolerance for uncertainty” is a robust concept that has been measured in a number of different ways.

Psychologists have been particularly intrigued by the notion a somewhat less encompassing idea than uncertainty. Ambiguity implies that the alternatives are known, while uncertainty implies that the alternatives are potentially unknown and even unknowable

Frenkel- Brunswick (1949) defined intolerance of ambiguity as a personality variable possessed by individuals who have a “tendency to resort to black-white solutions, to arrive at premature closure as to valiative aspects, often at the neglect of reality, and to seek for unqualified and unambiguous people overall acceptance and rejection of other people”

Transforming this concept into a measurable construct proved somewhat elusive. Numerous self-report measures were developed based on slightly different conceptualizations (Budner, 1962; Ehrlich, 1965; MacDonald, 1970; Furnham, 1994). For instance, over 35 years ago Budner (1962) developed a scale that has been widely used and considered psychometrically sound. He defined tolerance for ambiguity as “the tendency (to interpret) ambiguous situations as desirable” (p. 29). He argued that ambiguous situations are “characterized by novelty, complexity, or insolubility”

Perhaps it should not be surprising that there is some ambiguity regarding the definition of “ambiguity”. Indeed, Bochner (1965) discovered nine primary and nine secondary characteristics of the tolerance for ambiguity concept. Norton (1975) content-analyzed references to ambiguity in Psychological Abstracts from 1933 to 1970 and found that eight categories emerged. But he also noted that “the essence of each category interpenetrates the essences of all other categories” (p. 609). In short, uncertainty like ambiguity is associated with a number of closely-related concepts but at the core, there are a few fundamental notions that pervade the various definitions. People have different tolerance levels for uncertainty that are associated with a number of factors. Despite the fact that various measures have been used to measure tolerance for uncertainty (or ambiguity), researchers found differences between people.

Some researchers speculate that the underlying desire of those who are less tolerant of uncertainty is to avoid conflict and anxiety (Hamilton, 1957). On the flip side, researchers typically have not reported that tolerance for uncertainty varies on the basis of gender, age, or education level (Furnham, 1995). Many different approaches and methods were used in these largely unreplicated studies, which make it difficult to draw any firm conclusions.

Hofstede (1984) is not afraid to speculate on the direction of the influence.

Societal rules, rituals, educational standards, religious orientations, and technologies are cultural forces that shape an individual's responses to uncertainty which will affect the worklifebalance.. Hofstede's “Uncertainty Avoidance Index” is based on three survey questions and has been administered in 40 countries. Organizations typically try to reduce the amount of environmental uncertainty. Those who take the internal tact are concerned with the impact of uncertainty on employees. For example, some researchers have claimed that newly hired employees who experience high levels of uncertainty tend to be less satisfied with their jobs, less productive, and more likely to voluntarily leave their organizations

The most important thing the managers and organisations should know is how an organization can conceptualize and manage an essentially chaotic array of environmental issues, such as changing government regulations, consumer demands and competitive pressures? Burns and Stalker's (1961) classic study of 20 English and Scottish organizations indicated that more "mechanistic" organizational structures worked best in stable environments, while more "organic" structures worked best in dynamic environments.

In recent years, less static and more fluid approaches have emerged that seek to effectively adapt to uncertainty rather than eliminate it. For example, Courtney, Kirkland, 13 and Viguerie (1997) identify four levels of uncertainty that organizations can face when forecasting about the future: a clear-enough future, alternate futures, a range of futures, and true ambiguity. They suggest that the organization's strategic posture should be directly related to the type of uncertainty faced. In contrast to many scholarly approaches, these consultants are concerned with how to effectively manage uncertainty. Thus, so many approaches are emerging which are focusing on the benefits of uncertainty .

Review of literature enabled me to focus on the following objectives of the study.

OBJECTIVES

1. To identify the specific organisational factors impacting WorkLifeBalance.
2. To find out the relationship between extent of uncertainty and WorkLifeBalance.
3. To find out the adverse consequences of WorkLife Imbalance.

There are many organisational factors which can impact WorkLifeBalance of employees but my study seeks to confine to job context and job content factors. The following are the job context and job content factors:

In 1959, Frederick Herzberg, a behavioural scientist proposed a two-factor theory or the motivator-hygiene theory. According to Herzberg, there are some job factors that result in satisfaction while there are other job factors that prevent dissatisfaction. According to Herzberg, the opposite of "Satisfaction" is "No satisfaction" and the opposite of "Dissatisfaction" is "No Dissatisfaction".

Herzberg classified these job factors into two categories-

- a. **Hygiene factors (Job Context)-** Hygiene factors are those job factors which are essential for existence of motivation at workplace. These do not lead to positive satisfaction for long-term. But if these factors are absent / if these factors are non-existent at workplace, then they lead to dissatisfaction. In other words, hygiene factors are those factors which when adequate/reasonable in a job, pacify the employees and do not make them dissatisfied. These factors are extrinsic to work. Hygiene factors are also called as **dissatisfiers or maintenance factors** as they are required to avoid dissatisfaction. These factors describe the job environment/scenario. The hygiene factors symbolized the physiological needs which the individuals wanted and expected to be fulfilled. Hygiene factors include:
 - Pay - The pay or salary structure should be appropriate and reasonable. It must be equal and competitive to those in the same industry in the same domain.
 - Company Policies and administrative policies - The company policies should not be too rigid. They should be fair and clear. It should include flexible working hours, dress code, breaks, vacation, etc.
 - Fringe benefits - The employees should be offered health care plans (mediclaim), benefits for the family members, employee help programmes, etc.
 - Physical Working conditions - The working conditions should be safe, clean and hygienic. The work equipments should be updated and well-maintained.
 - Status - The employees' status within the organization should be familiar and retained.
 - Interpersonal relations - The relationship of the employees with his peers, superiors and subordinates should be appropriate and acceptable. There should be no conflict or humiliation element present.
 - Job Security - The organization must provide job security to the employees.
- b. **Motivational factors (Job Content)-** According to Herzberg, the hygiene factors cannot be regarded as motivators. The motivational factors yield positive satisfaction. These factors are inherent to work. These factors motivate the employees for a superior performance. These factors are called satisfiers. These are factors involved in performing the job. Employees find these factors intrinsically rewarding. The motivators

symbolized the psychological needs that were perceived as an additional benefit. Motivational factors include:

- Recognition - The employees should be praised and recognized for their accomplishments by the managers.
- Sense of achievement - The employees must have a sense of achievement. This depends on the job. There must be a fruit of some sort in the job.
- Growth and promotional opportunities - There must be growth and advancement opportunities in an organization to motivate the employees to perform well.
- Responsibility - The employees must hold themselves responsible for the work. The managers should give them ownership of the work. They should minimize control but retain accountability.
- Meaningfulness of the work - The work itself should be meaningful, interesting and challenging for the employee to perform and to get motivated

RESEARCH METHODOLOGY

The study is basically of exploratory in nature. It adopted a deductive method to identify a probable research hypothesis to be tested empirically in further studies. The study is informal in nature and basically rely on the opinions elicited from IT employees of both men and women working in and around Hyderabad. Based on the opinion, study and literature review on the subject area enabled me to identify the probable hypothesis for future studies.

ANALYSIS AND APPRAISAL OF THE STUDY

1. In the informal interviews with the IT employees opinions were elicited by asking several questions bearing on organizational factors impacting WorkLifeBalance. After analysis of the opinion most of the organizational factors can be grouped into job context and job content factors.

The identified job context factors are:

- a. Pay - The pay or salary structure should be appropriate and reasonable. It must be equal and competitive to those in the same industry in the same domain.
- b. Company Policies and administrative policies - The company policies should not be too rigid. They should be fair and clear. It should include flexible working hours, dress code, breaks, vacation, etc.
- c. Fringe benefits - The employees should be offered health care plans (mediclaim), benefits for the family members, employee help programmes, etc.
- d. Physical Working conditions - The working conditions should be safe, clean and hygienic. The work equipments should be updated and well-maintained.
- e. Status - The employees' status within the organization should be familiar and retained.
- f. Interpersonal relations - The relationship of the employees with his peers, superiors and subordinates should be appropriate and acceptable. There should be no conflict or humiliation element present.
- g. Job Security - The organization must provide job security to the employees.

Similarly the identified job content factors are:

- Recognition - The employees should be praised and recognized for their accomplishments by the managers.
 - Sense of achievement - The employees must have a sense of achievement. This depends on the job. There must be a fruit of some sort in the job.
 - Growth and promotional opportunities - There must be growth and advancement opportunities in an organization to motivate the employees to perform well.
 - Responsibility - The employees must hold themselves responsible for the work. The managers should give them ownership of the work. They should minimize control but retain accountability
 - Meaningfulness of the work - The work itself should be meaningful, interesting and challenging for the employee to perform and to get motivated
2. Respondents were also asked the impact of uncertainty on WorkLifeBalance. Most of them were of the view that uncertainty particularly in work schedule are extended working hours and frequent job changes were the factors which played a major role in impacting WorkLifeBalance. It can be hypothesized that more the uncertainty, higher will be the impact on WorkLifeBalance.

3. Lastly respondents were asked regarding the adverse effects of WorkLife Imbalance. Most of the were of the view that some essential personal needs, family obligations could not be carried on because of Work Life Imbalance and they were also of the opinion that it would effect their motivational level in a negative way reflecting in job performance also.

From the above section of analysis and appraisal the following are the findings regarding WorkLifeBalance.

FINDINGS

1. It is found that the context and content factors are effecting the WorkLifeBalance.
2. It is found that whenever there are no clear policies, procedures and implementation in the above listed programs and the organizational aspects, there would be a scope for high level of uncertainties.
3. The adverse consequences of WorkLife Imbalance are: According to Indian environment -women employees, time schedule, overtime working, no liberal leave policies etc.

LIMITATIONS OF THE STUDY

My study is basically of exploratory in nature taking the opinion of IT employess informally. Therefore the findings and conclusions are tentative in nature to be authenticated by conducting further empirical studies.

RECOMMENDATIONS FOR FURTHER STUDIES

Based on my exploratory study the following are the hypothesis which can be taken up for future empirical studies.

1. The specific role of job context and content factors in impacting WorkLifeBalance.
2. There is a scope for studying the impact of organisational uncertainties and their impact on WorkLifeBalance.
3. There is a scope for WorkLifeBalance with special reference to IT women employees.

CONCLUSION

In conclusion, it can be mentioned that WorkLifeBalance is a phenomenon effected by many factors of which organisational factors and uncertainties are the significant one's. The earlier studies has provided many useful insights into how uncertainty can be managed without affecting WorkLifeBalance.. Due to the inherent lack of predictability and complexity of uncertainties, organisations face lot of challenges.

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IMPACT OF QUARTERLY RESULTS ON SHARE PRICES OF COMPANIES

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INTRODUCTION

There are many factors that influence the share prices of the companies in the capital markets. One of those factors is the quarterly reports released by the companies. Quarterly reports show the performance of the companies for every three months. As per listing agreement, every company is mandated to report financial results at the end of each quarter and within 30 days from the end of previous quarter. Interim reporting improves the ability of investors, creditors and others to understand an enterprise's capacity to generate earnings and cash flows, its financial condition and liquidity. The financial year of Indian companies begins on 1st April and ends on 31st March. Unlike western countries, Indian companies do not follow calendar year.

OBJECTIVES OF THE STUDY

1. To study the changes in share prices before and after the announcement of quarterly results.
2. To probe whether there exists any relation between EPS as stated in the quarterly results and the share prices.

SCOPE OF THE STUDY

The study includes the data of two quarters namely Q2 and Q3 of FY 2018-18 i.e 01/07/2018 to 30/09/2018 and 01/10/2018 to 31/12/2018. The data of eight companies has been taken in to consideration. The share prices of the companies before and after the announcement of quarterly reports have been considered. The pre-announcement period consists of three days prior the announcement date and the post announcement period consist of three days after the announcement date. If any of the above mention days is a non-trading day the nearest date is taken in to consideration

LIMITATIONS OF THE STUDY

1. As the sample of eight companies is taken under study it can't be generalised to the whole capital market.
2. The time period of two quarters may not generalize the behaviour of the share prices for a long time period.
3. The study emphasises on the relation of share prices and the end product of the financial performance of the company i.e. EPS though the investors may consider many other variables of the quarterly reports.

METHODS OF DATA COLLECTION

The study required the collection of financial results and stock prices of companies which fall under secondary data. CMIE Prowess, National stock exchange and respective websites of companies have been used as major sources for data collection. Appropriate care has been taken for the veracity of the data and to make the results and findings reliable.

TOOLS AND TECHNIQUES USED FOR DATA ANALYSIS

1. Average: The average Share prices for 3 days before declaring quarterly result has been calculated and used in analysis.
2. Standard Deviation: The standard deviation has been used to measure the variation in share price before and after the declaration of quarterly results.

RESEARCH PROCESS

1. Collect share prices and EPS for all the 8 samples 3 days before and after the declaration of share prices.
2. Calculate the average of share prices before and after the declaration quarterly results.
3. Make readings weather there exist any relation between the EPS and the average share prices.
4. Calculate standard deviation for the share prices before and after the declaration of share prices.

READINGS BEFORE THE ANNOUNCEMENT OF COMPANY RESULTS (JUNE-2018)

	EPS	Share Prices				
NAME OF THE COMPANY	(june-2018)	26-09-2018	27-09-2018	28-09-2018	AVG	SD
Bharat Petroleum Corpn. Ltd.	11.66	368.65	372.2	374.15	371.67	2.28
Bharti Airtel Ltd.	-3.65	361.3	356.8	338.55	352.22	9.84

G A I L (India) Ltd.	5.58	375.1	377.7	379	377.27	1.62
Infosys Ltd.	16.04	717.85	724.8	730.05	724.23	5.00
Reliance Industries Ltd.	13.92	1251.4	1253.75	1257.95	1254.37	2.71
State Bank Of India	-5.46	263.85	265.35	265.5	264.90	0.74
Tata Consultancy Services Ltd.	18.64	2142.15	2188.85	2183.7	2171.57	20.91
Vedanta Ltd.	0.21	241.55	240.65	232.3	238.17	4.16
Wipro Ltd.	4.27	319.25	318.95	324	320.73	2.31

READINGS AFTER THE ANNOUNCEMENT OF QUARTERLY RESULTS (SEP-2018)

	EPS	Share Prices				
NAME OF THE COMPANY	(sep-2018)	01-10-2018	03-10-2018	04-10-2018	AVG	SD
Bharat Petroleum Corpn. Ltd.	6.2	368.35	377.85	331.15	359.12	20.15
Bharti Airtel Ltd.	-1.41	326.75	318.45	310.15	318.45	6.78
G A I L (India) Ltd.	8.7	381	381.75	367.95	376.90	6.34
Infosys Ltd.	19.92	746.65	728.5	707.2	727.45	16.12
Reliance Industries Ltd.	13.98	1231.68	1205.1	1122.25	1186.34	46.60
State Bank Of India	1.06	273.85	271.7	271.35	272.30	1.11
Tata Consultancy Services Ltd.	19	2255.55	2162.85	2064.8	2161.07	77.88
Vedanta Ltd.	19.92	232.65	240.1	239.4	237.38	3.36
Wipro Ltd.	3.57	330.15	327.5	325.65	327.77	1.85

ANALYSIS

- From the above tables it is read that the volatility of the share prices are high after the declaration of the quarterly results which is shown by the increased standard deviation after the declaration. The SD of BPCL remains 2.28 while after the declaration of results it increases to 20.15. The share prices become more volatile particularly in case of companies with high share prices i.e. Tata (2.71-46.6) TCS (20.91-77.88).
- Out of all the nine samples only three companies (BPCL, Infosys, SBI) show positive correlation between EPS and average share prices.

READINGS BEFORE THE ANNOUNCEMENT OF QUARTERLY REPORTS (SEP-2018)

	EPS	Share Prices				
NAME OF THE COMPANY	(sep-2018)	26-12-2018	27-12-2018	28-12-2018	AVG	SD
Bharat Petroleum Corpn. Ltd.	6.2	366.35	364.6	361.9	364.28	1.83
Bharti Airtel Ltd.	-1.41	320.45	316.7	316.55	317.90	1.80
G A I L (India) Ltd.	8.7	353.4	356.45	356.3	355.38	1.40
Infosys Ltd.	19.92	644.05	656.8	656.95	652.60	6.05
Reliance Industries Ltd.	13.98	1098.35	1120.2	1129.79	1116.11	13.16
State Bank Of India	1.06	294.15	292.15	294.8	293.70	1.13
Tata Consultancy Services Ltd.	19	1889.2	1908.95	1896.05	1898.07	8.19
Vedanta Ltd.	19.92	196.4	195.85	199.19	197.15	1.46
Wipro Ltd.	3.57	326.15	327.45	330.05	327.88	1.62

READINGS AFTER THE DECLARATION OF RESULTS (DEC-2018)

	EPS	Share prices				
NAME OF THE COMPANY	(dec-2018)	01-01-2019	02-01-2019	03-01-2019	AVG	SD
Bharat Petroleum Corpn. Ltd.	2.52	367.2	357.95	352.5	359.22	6.07
Bharti Airtel Ltd.	0.57	319.5	312.65	313.5	315.22	3.05
G A I L (India) Ltd.	7.46	362.15	350.3	349.95	354.13	5.67
Infosys Ltd.	8.01	665.05	669.05	669.15	667.75	1.91
Reliance Industries Ltd.	14.08	1119.01	1113.42	1101.37	1111.27	7.36

State Bank Of India	4.43	299.6	293.9	291.1	294.87	3.54
Tata Consultancy Services Ltd.	19.95	1902.8	1923.3	1899.95	1908.68	10.40
Vedanta Ltd.	13.25	202.1	193.15	187.95	194.40	5.84
Wipro Ltd.	5.59	326.65	325.55	325.5	325.90	0.53

ANALYSIS

1. Even in the above quarter the volatility of the share prices increases after the declaration of share prices which is shown by the increasing volatility.
2. In the sample of nine companies there exists a positive relation in case of five companies(BPCL, GAIL,SBI, TCS, Vedanta.

CONCLUSIONS

1. The volatility of the share prices increases after the declaration of results irrespective of the fact whether there exist any relation between the EPS as shown in the results and average share prices.
2. The relation between EPS and average share prices cannot be constructed as only 9 companies show positive relation in the whole of 18(9*2 quarters) samples.
3. The Gov. companies like BPCL and SBI has shown a positive relation between EPS and average Share prices consecutively for two quarters whereas large private companies like Reliance and WIPRO has failed to show a positive relation between the two variables. Hence, it can vaguely be concluded that investors of Gov. companies are more sensitive than the investors of private companies.
4. Market expectations play a major role in the declaration of share prices than the variables in quarterly reports. Even a high positive change (say 20%) in important variable of quarterly reports like EPS, may setoff if the market expectations are even higher (say 30%).

SCOPE FOR FURTHER RESEARCH

1. Other variables of quarterly results such as sales, EBIT, PAT can be taken in to consideration and studied if there exists any relation between the average share prices and the considered variables.
2. Efforts can be made to study the theory of market expectations on which the share prices are largely based.

“VUCA” IN INDIAN PERSPECTIVE – A STUDY**Dr. Ch. Rama Krishna**Assistant Professor, Government College, Mandapeta, E. G.

ABSTRACT

VUCA which is an acronym coined by the U.S. army in the nineties to describe the post-cold war world and which embraced by all types of leaders in all sectors of the society in describing the world in which they are in operation. There isn't any doubt; definitely we are in the VUCA environment.

While we are doing our business, we've got a very complicated landscape which is moving on us in many different directions. That's why we need to have an effective organisation that can move quickly." The CEOs and of the huge business organisations have to understand the challenges of VUCA environment. This paper studies how the CEOs as leaders of Indian companies are following the principles of VUCA, striving to get the skills of VUCA, and the role of them in creating, shaping and transforming their organization's culture as more dominant in the current era.

Keywords: VUCA, VUCA Skills, CEOs of India.

INTRODUCTION

VUCA (Volatility, Uncertainty, Complexity and Ambiguity), is a term derived from the military vocabulary. It is nowadays used by many organisations to strategize their growth in the current economic slowdown. Though the term VUCA has been in vogue since the late 1990s. Gopalakrishnan, The Director of Tata Sons believes that it has always been present in society since time immemorial and that VUCA has happened in the concurrent world of SPCC (Simple, Predication, Clear, Calm). Though the process of change of technological responses has kept pace with VUCA development, there remains a constant gap which calls for even more technical responses. However, Gopalakrishnan believes that it is the human nature which hasn't adapted fast enough to this change. Because of human behaviour which changes gradually, becomes important to focus on human addictiveness in today's VUCA world. On the volatility and instability around us, the current work structure is designed to make us control the environment around us. However, nature looks at not controlling turbulence, but leveraging it, which is far more effective in the long run and thus, companies should look at leveraging turbulence and not suppressing it.

It's important to learn from nature around us and that the corporate world has neglected to do that. Nowadays companies are looking at efficiency and getting the best bang for the buck, nature, on the other hand, highlights on effectiveness and not efficiency. Most of the companies look going down a straight path; nature shows us a spiral path. We have to believe that for institutions to successfully respond to the VUCA challenge, we need stare the world differently and that it is not a bad proposition for companies to go around in circles actually, restate that in today's VUCA world human adaptive ness is complex and a big challenge.

Once corporate values are enunciated and shared, the executives fortify them through personal example and by ensuring they surge throughout the organization. These Executives also understand they need others to frame and fortify the corporate culture. They manoeuvre the values to guide assumed decisions and process the personnel development and they ensure that all the organizational systems are regulate and synchronized to concretize the culture.

Among other values, prominent executives stressed empowerment, integrity and employee development at all levels. They also recognized that they could not shape the culture alone. "I can certainly set the tone, but then I need all the executives to do that exact same thing. They need accurate senses to find it, they need to model it and they need to embrace and nourish it." These CEOs did more than formally reinforcing the company's values; they were present throughout the organization to push and fortify the values. "You've got to be perceivable, particularly in a franchise business—franchisees have to know that the leadership is noticeable,". "So we are very open, obtainable and accessible." Today the passionate world is in a crazy spin. The leaders should cope us with this volatile, uncertain and constantly in the recent and new changing times.

INDIAN CEOS - VUCA SKILLS

Organisations whose executives have a high VUCA (Volatility, Uncertainty, Complexity and Ambiguity) capability are 3.5 times more likely than those with a low VUCA capability to have a strong leadership bench. To the extent our Indian CEOs aware of this. When we look into the possession of VUCA skills....

This new VUCA environment is rigorous even the most able of leaders who found that their skills are becoming Exhaust in this new passionate world .To confront newer challenges which they have to face in this newer world, they should need to advance the new skills to handle their responsibilities efficiently.

The scarcity of skills which to days CEOs have to excel in the VUCA universe is:

SKILLS OF FORECASTING AND PREDICTABILITY

- 1) Forecasting and predictability Leaders with clear goals of where they want their companies to be in three to five years can better environment volatile environmental changes such as economically downtrends or new rivalries or competitors in their markets;
- 2) Rapid decision making it is the ability to spread across the organisation and move quickly to apply outcomes.

Coming to the point of that to the what extent our CEOs prepared and ready to face this VUCA World..

Indian leaders are predecessors in inexpensive innovation and have a flexible approach. When compared with other countries our Country is behind in, is infrastructure and technical alertness required to face the challenges of the VUCA world. And also, the changing political scenario will provide enough and more opportunities for the leaders to develop new skills required to grow in the VUCA world.

SKILLS OF PROMPTNESS

Developing the skills on Time To Time are very important in facing the challenges of VUCA. CEOs need to enhance to deal and keep in touch with arising societal, legislation and taxation trends. However, our CEOs lack in

- 1) Super cognitive skills for dealing with diverse employees, particularly in the digital world;
- 2) Leadership in turbulent times for navigating through complexity, chaos, and confusion with an ability to scan the business environment and
- 3) Skills for train the employees in motivating creativity and innovation.

We learnt lessons from high volatility swings in 1998-99 though we continue to face a VUCA world. Handling the global recession of 2007-2008 without effecting India's GDP growth of seven to eight per cent, was an ample proof that we learnt to keep risks at acceptable levels. The global business environment requires a dynamic strategy to steer out companies through the VUCA world.

SKILLS OF UPGRADATION

Most CEOs are unwilling to learn from mistakes. Also, they need deep competence and infectious enthusiasm to create the right leadership team with rock solid values and a culture of great execution.

Administration should take the lead to learn and remains optimistic, despite the large number of challenges in running a business in India. The ones who have the hunger to learn, the humility to listen to diverse stakeholders and the ability to inspire themselves and others are prepared to face VUCA challenges. The ones who allow the 'ego' to create fear lose out.

The dearth of skills in top leaders across all countries converge around internal capability. CEOs need to continuously upgrade their skills in order to maintain quality products, smart workers, and strong customer appeal and form lucrative collaborations. Remaining flexible and taking advantage of technology are of the paramount importance.

SKILLS OF ADOPTION

CEOs do not have a choice in this matter anymore. Leaders who have not judiciously changed business models, in accordance with the changing times, had to see their companies shut shop. We are living in a digitally connected nation where our mode of communication has changed dramatically. At the heart of everything are employees. Recruiting and retaining quality human capital are foremost concerns of all company leaders. How we build and nurture our employees can have a significant impact on all organisations.

The first skill which is most lacking is foresight the ability to look ahead, picture possible scenarios, evaluate options and consequences, and act promptly. The second skill in short supply is the ability to accept and objectively evaluate opinions, which are antithetical to their own beliefs. In a VUCA world, teams must pull together through every thick and thin.

SKILL OF UNDERSTANDING THE CHANGING ENVIRONMENT

All leaders acknowledge VUCA challenges, regardless of industry or geography, scale or spread but not all of them may be prepared. Those leaders who are reactive by nature are under-prepared; those who are proactive are prepared. In uncertain times, it is important to understand the discontinuities created by change and focus on the opportunities arising from the same.

To be VUCA-ready, organisations need to pay attention to volatilities and discontinuities.

VIEWS OF INDIAN EXECUTIVES ON VUCA IN INDIA

Welcome to the VUCA (volatile, uncertain, complex and ambiguous) world, where you will find more and more leaders doing things differently. In this age of rapid change – both external and internal – they can't afford to remain closeted in their corner offices. The leadership playbook of yesterday no longer works and new rules and skills have to be employed.

In view of VUCA, Sri R. Gopalakrishnan, Director of Tata Sons at ISA's Global CEO Conference - Navigating VUCA, organised by the Indian Society of Advertisers (ISA) in partnership with exchange4media stated that India being a complex and cosmopolitan country has always existed in a VUCA world and the success of Indian entrepreneurs could be attributed to the fact that Indians are been wired for VUCA. The Tata Sons Director also emphasised on the importance of rediscovering intuition. He stated that intuition played a big role till the 16th century, when rationality took over. While rationality has its merits, intuition plays a big role in all critical decision making in life and business and ignoring this intuition will make the person/ company incapable of handling VUCA. Therefore, it will be "foolish to ignore" intuition. He also added that in the VUCA world, Indians were far more intuitive and likely to succeed. "Don't blame the environment, but look at your own focus," he concluded.

As per the Intention of Daizo Ito, President and regional head for India, Sth Asia Middle East of Africa, Panasonic India "Our leaders lack technical preparedness"

Manoj K Raut, CEO and Director, Institute of Directors commented on VUCA as "Change management skills will be the main predictor of a CEO's confidence"

Sanjeev Duggal, CEO and Director, Centum Learning Limited view on VUCA is "Leaders who did not judiciously change business models had to see their companies shut shop".

As per the words Arvind Thakur, CEO & Joint MD, NIIT Technologies.."Those leaders who are reactive by nature are under-prepared"

Anil Sachdev, founder and CEO, Grow Talent and School of Inspired Leadership (SOIL) opined That "CEOs hardly spend 30 to 50 per cent of their time on the people side of their business"

Dilip Puri, former Starwood India MD who is currently advisor to Marriott International, smiles disarmingly and says he is here because his market is here when asked for express his views on VUCA. A Leader, he is not the only one wading into the trenches. James Thomas, who leads the Indian business of Kronos, a workforce solutions company, is regularly studies and spending time with customers, partners and employees. "I find being in the trenches in real time on a regular basis very important and helpful. Then only we percept the heartbeat of customers and the market and its variations," says Thomas.

For Charulata Ravi Kumar, CEO Sapient Razor fish India, a big challenge is that 'leadership' itself has evolved to a new role "redefined not by leaders but rather by the influx of a whole new breed of young, dynamic, entrepreneurial and innovative start up minds that are breaking norms". She insists the importance of change of leadership style from direction to Guidance. "Leaders need to lead from the front, middle and all the sides. They have to mingle one with the teams and shed the notions of hierarchy."

SKILLS TO BE DEVELOPED BY OUR INDIAN LEADERS**DEALING WITH THE UNKNOWN**

When we Ask CEOs what their top challenges are and charting the unknown ranks high. "Secrets, Hidden, Unrevealed or Unknowns are emerging more rapidly every day," says Thomas.

"To lead today, one must know what to do when unknown what to do," says Santhosh Babu, managing director of OD Alternatives and a leadership coach.

For the Leaders, the other challenge, he says, is that organisations or Industry are no longer linear. "Today organisations are sustained, adapting, complex systems much like an ecosystem in a national park." This means leaders need to be adaptable and resilient.

KNOWING FROM PEERS

Hence how do the leaders cope with changing or current contexts and realities? A lot of them read extensively. Others hop on to knowledge hubs or forums. But Ravi Kumar says she has gained a lot more by “making in deep conversations with extra ordinary minds of performers and achievers than over-reading and participating in too many knowledge seminars”. Thomas of Kronos endorses this. “Leveraging peers or peer groups, networks and mentors help in gathering critical good counsel.” Also, as Ravi Kumar points out, “A leader need not be with a vast ocean of knowledge. In fact, it is an unreasonable task in today’s times when the information and pace of change overload is beyond grasping. Now What is critical is to seek out one who knows what to know or get and who can connect the dots across the many layers that this facts and change are creating.”

LEAD TOWARDS DUAL OR MULTI GOALS

Another big challenge for leaders today is facing their teams’ changing expectations. Today’s employees are highly individualistic and has personal and professional ambitions or goals. As Ravi Kumar says, “From the last couple of years, the need and ambition to reach one’s professional and personal goals simultaneously now require companies and leaders to look into both with equal zest.”

This is not saying that we are helping them to balance their lives, but it is about inspiration to achieve or enhance their potentiality, “ as leaders how we can push and support them to perform or achieve their goals or ambitions that differentiates among a boss, a manager, or a leader”. Although she insists the importance of guidance from mentors. She stresses that “Don’t neglect to be led or guide by our own inner self.” though, is reserved for Dilip Puri, who says to navigate through a time when disruption is the new normal, “ Make you must be a person always acquiring, developing and maintaining people who are smarter than you-People who praises your leadership”

CONCLUSION

It is vital to know about the customer, supplier, employee, so that organisational programmes can be improved and digitised. Sometimes, unlike in previous decades, there had been some compromises on the management of skills but with time, the processes and the frameworks on VUCA Skills management had evolved and definitely get improved. Most companies, had their own framework on compliances, corporate leaders’ corporate governance realised that if they did not get it right, the business would be negatively impacted in the long run.

From a regulatory perspective, India was quite well-regulated. On the conundrum of deteriorating asset quality of Indian Companies, we believed they didn’t fail in their assessment. “To say that organisations were not aware of the concern is insulting their intelligence”.

The organizational culture and the leadership at the top is the only central force which drives management and how companies succeed by coping with it”. As a country, we believe that the intent is there and there really has never faced the need of showing it to the outside world that we are doing it right. It is known and accepted. It was important to understand what had to be protected on the technology layer and what the weak points were, whether it be the entire network, the endpoints or anything else. There were several ‘unknown unknowns and hence this assessment should be left to the experts. Another critical factor for companies is that they needed to understand and identify costs versus risks involved.

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IMPACT OF LIQUIDITY, PROFITABILITY AND EFFICIENCY PERFORMANCE ON Z-SCORE OF SELECT INDIAN AVIATION COMPANIES

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ABSTRACT

Indian Airline Industry is one among the largest Aviation Industries world wide. It is in a new era of expansion, influenced by the factors such as low-cost carriers, modern airports, Foreign Investment, Advanced Information Technology etc. The most important among all is the growing upper middle class population as prospective customers and growing emphasis on regional connectivity. But since the last decade it has seen considerable changes in operations due to economic downturns and high fuel prices which caused air carriers in India to incur significant losses. There were mergers and acquisitions among airline companies to become financially stronger and to cope with the challenges of the economic environment. Therefore, there is a need to keep an eye on the financial performance of these companies and also to assess its impact on the Z-Score of these companies which is a measure of financial health and a tool to predict the insolvency. This research paper is an attempt to assess the impact of Liquidity, Profitability and Efficiency Performance on Z-Score of Select Indian Aviation Companies using Altman Z-score model and selected financial ratios. This study is carried out for a period of ten years i.e from 2007-2016.

Keywords: Indian Aviation Industry, Insolvency, Liquidity, Profitability, efficiency performance, Financial Health, Altman Z-score model.

INTRODUCTION

The civil airline business in India is in distress condition and vulnerable to changes in the economic environment and market variations. Therefore, the airline industry is characterized by unsteadiness being subject to many challenges including the high volatility in jet fuel prices and increasing labour costs. In the competitive business environment, the success of the business depends upon many factors. Corporate bankruptcy has always been analyzed due to its severe consequences and the impact of insolvency could be enormous to the firm and its stakeholders. The bankruptcy legislation states that a debtor shall begin bankruptcy proceedings if the debtor is insolvent. The debtor is considered insolvent if he is unable to fulfill his economic obligations as they mature. He is not considered insolvent if his property and income are sufficient to cover the obligations. The proposed study shall discuss the Altman Z-score as a model used to foresee a possible bankruptcy and its applicability to determine whether India's major airlines are considered as potential bankruptcy candidates. The calculation and analysis of Altman's Z-score is conducted for selected Indian carriers.

INDIAN AVIATION SECTOR

The civil aviation market in India is all set to become the world's third largest by 2020. Total passenger traffic stood at a 190.1 million in FY15, registering an increase of 12.47 per cent. By 2020, passenger traffic at Indian airports is expected to increase to 421 million from 190.1 million in 2015. Domestic passenger traffic expanded at a compound annual growth rate (CAGR) of 11.8 per cent over FY06–15. The Airports Authority of India (AAI) aims to bring around 250 airports under operation across the country by 2020.

PRESENT PASSENGER TRAFFIC SCENARIO

Domestic air passenger traffic increased by 23.20 percent in October 2016 on a year-on-year basis as carriers flew 86.72 lakh passengers in the month. In the same month last year, airlines carried 70.39 lakh passengers. In September 2016, the passenger traffic rose by 23.46 percent to 82.30 lakh as compared to 66.66 lakh in corresponding month previous year. Passenger traffic during January-October period grew by 23.18 percent. Passengers carried by domestic airlines during January-October 2016 were 813.70 lakh as against 660.60 lakh during the corresponding period of previous year thereby registering a growth of 23.18 percent.

INVESTMENT IN THE SECTOR

FDI inflows in air transport (including air freight) is growing significantly. The industry has attracted 0.32% of total FDI Inflow in India. The sector attracted foreign direct investment (FDI) worth \$318.52 million or Rs 2,142.31 crore during January-March 2016 period as compared to \$7.58 million and Rs 47.04 crore during corresponding period same year.

REVIEW OF LITERATURE

Safiuddin S.K (2018) made an attempt to measure the financial health and insolvency prediction of select Indian Aviation Companies. A sample of 04 aviation companies were selected and it was found that out of the four companies selected for the study, two of them are potential candidate of bankruptcy despite of many improvements.

Gedminaitė, I. (2017) analyzed the researches and models of other authors and selected the most significant financial indicators used in predicting the risk of bankruptcy of small and micro enterprises in the construction sector, the results obtained showed that not all models of Lithuanian authors can be applied in a similar risk assessment of bankruptcy of construction companies, and significant financial indicators, for example, net profitability and general short-term solvency, confirm the results obtained by bankruptcy prediction models.

Mushtaq Khan M and Safiuddin S.K. (2016) made an attempt to predict the bankruptcy of selected two Indian Aviation companies and findings of the study revealed that both the companies are a potential candidate of bankruptcy despite of many improvements.

Roli Pradhan (2014) in his study the analysis of Indian Banking sector suggested that the Z score value of Oriental Bank of Commerce is the highest amongst the mentioned three banks. The Z score reveals that it is safe to lend to the three banks as the Z values obtained lie in the safe Zone.

Monique Timmermans (2014) studied U.S. Corporate Bankruptcy Predicting models to see how accurate are the bankruptcy predicting models of Altman(1968), Ohlson(1980) and Zmijewski(1984) after recalibration, when they are applied to U.S. listed firms in the period after the BACPA change in bankruptcy law? The predictive power of all three models is low, but for Altman(1964) and Ohlson(1980) bankruptcies are overpredicted, as was expected. For the model of Zmijewski(1984), the amount of non-bankruptcies was overpredicted, which is contrary to what was expected.

Ummed & Omvir (2012) in their study Distress Prediction Model-Model for predicting Bankruptcy in Aviation Industry found that of the three firms having Z-Score less than 2.60, two have been declared bankrupt. The lending institution has recalled term loan from one firm. Only one firm is financially stable.

Campbell (2008) in the study proposed a reduced form of econometric model using both accounting and market data to predict corporate bankruptcies and failures. The study reveals that their model is more accurate than other alternatives. A more accurate reduced form model of them confirms the negative association between distress risk and equity returns too.

Boritz et al. (2007) studying bankruptcy in Canada founds predictive accuracy of Altman's and Ohlson's original models are higher than re-estimated model. They also compared the accuracy of models developed for Canadian firms, namely, Springate (1978), Altman and Levallee (1980), and Legault and Veronneau (1986). The study concludes the Canadian models are being simpler and requiring less data. All models have stronger performance with the original coefficients than the re-estimated coefficients.

Sun and Feng Hui (2006) revealed that bankruptcy not only brings much individual loss to interest parts such as stockholders, creditors, managers, employees, etc., but also too much bankruptcy will greatly shock the whole country's economic development.

Altman (1968) was the first one to use multivariate statistical modeling in his "Z-score model" to find combinations of financial ratios that can indicate bankruptcy risk. The ratios included in Altman's model were for example a return on assets ratio and a leverage ratio.

If we look at the recent past, Indian aviation has seen one of the best aviation company going bankrupt namely kingfisher airlines. Moreover Indian aviation sector has been in trouble in recent times because of financial distress and it is common for both private as well as government owned Air India.

OBJECTIVE OF THE STUDY

The primary objective of the study is to analyse the financial health of selected companies using Altman's Z-score Model and to assess the impact of liquidity, profitability and efficiency on Z-score.

RESEARCH METHODOLOGY

The research places an emphasis on analyzing the financial health of select Indian companies in the Aviation Industry. In addition to this the impact of liquidity, profitability and efficiency performance on Z-score is also assessed using selected ratios with the help of regression analysis.

The companies which have been selected for the analysis are the top four private airline companies of India on the basis of market share. The date that has been used for this study is based upon the financial indicators drawn from the databases available of the selected companies in the Indian Aviation Industry.

TECHNIQUES OF DATA ANALYSIS

The tools which have been used for the analysis are selected ratios used for measuring liquidity, profitability and efficiency performance. Altman's Z-score that puts together five financial ratios (Four for service industry) generated using the following formula for publicly traded service sector firms.

$$\text{Z-score} = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5 \text{ (original Z-Score Model)}$$

$$\text{Z-score} = 3.25 + 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4 \text{ (New Z-Score Model)}$$

Where

X_1 = Working capital/total assets

X_2 = Retained earnings/total assets

X_3 = EBIT/total assets

X_4 = Equity /total liabilities

X_5 = Sales/ Total Assets

SCOPE OF THE STUDY

Scope of the study is confined to financial health of selected Aviation companies in India and the impact is assessed using regression analysis. The study was carried out for a period of 10 years from 2007 to 2016. The overall financial indicators of the companies are assessed for measuring the liquidity, profitability performance and efficiency using selected ratios.

LIMITATIONS OF THE STUDY

Top players in the sector have been considered for the study based on market capitalization. The study is limited for a period of ten years and for some of the companies the data was not available for all the ten years. The data used for the study is based upon the financial reports and financial data available from various databases

FINANCIAL HEALTH OF SELECT INDIAN AVIATION COMPANIES USING ALTMAN Z-SCORE MODEL

The Z-score of Indigo for 2008 is 0.32 which means the company was in "distress zone" for this year, but for the year 2009 the company has performed well and the score increased to 6.20 and showed an increasing trend for the next two years as well. So, the company was in "safe zone" for the years 2009, 2010, and 2011. But showed a declining trend and fall down to 4.97 in 2012, which reveals that the company was in "grey zone". But again increased in 2013 and declined in 2014, the score fall down to 3.26, which means it is in "distress zone" again. For the year 2015 and 2016 the company has improved its performance and the Z-score has risen to 6.55, which is "safe zone". (see table 01)

The Z-score of Jet Airways in 2007 was 4.80 which means the company was in "grey zone" for this year, but for the year 2008 the company has not performed well and the Z-score has gone down and reached to 3.35 and it has been almost same for 2009. So, the company was in "distress" for the years 2008, 2009, and 2010. But the trend has continued and the Z-score has fallen in 2011 to 1.10, which means the company was in "distress zone" for the year 2011. But again jet airways has not performed well 2012, in 2012 the Z-score falls to -1.18, which means it is in "distress zone" again. For the year 2013,14 and 2015 the z-score has fallen further and the company was in "distress zone" In 2016 there has been a bit of improvement and the z-score has improved a bit but still jet airways is in "distress zone". (see table 01)

The Z-score of Go Airlines for 2011 was -5.77 which means the company was in "distress zone" for this year, but for the year 2012 the company has not performed well and the Z-score has gone further down and reached to -13.46. So, the company was in "distress" for the years 2012. But in 2013 company has performed good and thereby improving z-score, which was 4.66. So, the company was in "grey zone" for 2013. In 2014 the z-score had fallen further and reached to 1.96 keeping the company in "distress zone". The trend has continued and z-score had fallen for 2015 and 2016 having z-score of -4.11 and -4.09 respectively and putting the company in "distress zone". there has been a bit of improvement and the z-score has improved a bit b but still Go airlines is in "distress zone". (see table 01)

The z-score of spice jet was -0.16 which is very low and shows the company was in “distress zone” for this year. In 2008, there had been some improvement and Z-score had shown some improvement and reached to 1.24, but still it is “distress zone”. In 2009 the company's performance has worsened and the z-score decreased to -4.18, which is again “distress zone”. The Z-score was -1.88 for 2010, 0.92 for 2011, -8.22 for 2012 and -1.79 in 2013, which means company was in “distress zone” for all these years. For 2014 the z-score had further decreased to -9.42 and in 2015 it had crossed all previous own records and reached to -11.16, and in 2016 there had been a good recovery with the z-score reaching to 0.086, but for all the years of study the spice jet was in “distress zone”. (see table 01)

IMPACT OF LIQUIDITY, PROFITABILITY AND EFFICIENCY ON Z-SCORE OF SELECT INDIAN AVIATION COMPANIES:

A. Impact of Liquidity, profitability and efficiency on Z-score of Of Indigo

The calculated R square is 0.619 which reflects that a major change in Z-Score is caused efficiency performance, liquidity performance and profitability performance. It is depicted from the analysis that there is no significant impact of efficiency performance, liquidity performance and profitability performance measured through receivables turnover, current ratio and return on equity on Z-Score of the firm as the significant value is 0.156. There is no significant impact of efficiency performance measured through receivables turnover on Z-Score of the firm is 0.406. There is no significant impact of liquidity performance measured through current ratio on equity on Z-Score of the firm as the significant value is 0.603. There is no significant impact of profitability performance measured through return on equity on Z-Score of the firm as the significant value is 0.121. (table.02)

B. Impact of Liquidity, profitability and efficiency on Z-score of Of Jet Airways

The calculated R square is 0.654 which reflects that a major change in Z-Score is caused by the independent variables/predictor variable i.e efficiency performance, liquidity performance and profitability performance. It is depicted from the table that there is no significant impact of efficiency performance, liquidity performance and profitability performance measured through receivables turnover, current ratio and return on equity on Z-Score of the firm as the significant value is 0.078. There is no significant impact of efficiency performance measured through receivables turnover on Z-Score of the firm as the significant value is 0.308. There is no significant impact of liquidity performance measured through current ratio on equity on Z-Score of the firm as the significant value is 0.056. There is no significant impact of profitability performance measured through return on equity on Z-Score of the firm as the significant value is 0.898 (table.03)

C. Impact of Liquidity, profitability and efficiency on Z-Score of Go Air

The calculated R square is 0.234 which reflects that 23.4% of change in Z-Score is caused by efficiency performance, liquidity performance and profitability performance. It is depicted from the table that there is no significant impact of efficiency performance, liquidity performance and profitability performance measured through receivables turnover, current ratio and return on equity on Z-Score of the firm as the significant value is 0.671. There is no significant impact of efficiency performance measured through receivables turnover on Z-Score of the firm as the significant value is 0.957. There is no significant impact of liquidity performance measured through current ratio on equity on Z-Score of the firm as the significant value is 0.435 (table.04)

D. Impact of Liquidity, profitability and efficiency on Z-score of Spice Jet

The calculated R square is 0.446 which reflects that a 44.6% of change in Z-Score is caused by efficiency performance, liquidity performance and profitability performance. It is depicted from the table that there is no significant impact of efficiency performance, liquidity performance and profitability performance measured through receivables turnover, current ratio and return on equity on Z-Score of the firm as the significant value is 0.127. There is no significant impact of efficiency performance measured through receivables turnover on Z-Score of the firm as the significant value is 0.412. There is no significant impact of liquidity performance measured through current ratio on equity on Z-Score of the firm as the significant value is 0.377. (table.05)

FINDINGS

The following are the major findings from the project

- The Z-score of Indigo for the year 2016 reveals that the financial health of the company is in “safe zone”. So, there are very less or no chances of company going bankrupt in the next two years as per this model. There was no significant impact of liquidity, profitability and efficiency on z-score of the company.
- The Z-Score of Jet Airway for the year 2016 has improved over the previous year but the score reveals that the company is still in “distress zone”. Therefore it is revealed that the airline firm is a potential bankruptcy

candidate. There was no significant impact of liquidity, profitability and efficiency on z-score of the company.

- Go Airlines carried out with the help of z-score reveals that in most of the years it is in “distress zone”. The Z Scores calculated shows a varied trend over the years. There was no significant impact of liquidity, profitability and efficiency on z-score of the company.
- The analysis of Spice Jet Ltd made through z-score reveals that there had been a good recovery with the z-score reaching to 0.086, but for all the years of study the spice jet was in “distress zone”. There was also no significant impact of liquidity, profitability and efficiency on z-score of the company.

SUGGESTIONS

It is suggested that Jet Airways, Go Airlines and Spice Jet needs to enhance its earnings through expansion of the business and adopting new policies for development of the business. Several schemes may be introduced to attract customers and improve the earning ability of the firm. In terms of efficiency as calculated through financial measures, all the companies are under performers and reveal that there is a need to make effective utilization of assets and avoid blockage of funds. In terms of liquidity, Jet Airways, Go Airlines and Spice Jet can face liquidity crisis at any point of time, these companies need to improve their financial ability to meet their current obligations. Investment in current assets needs to be concentrated upon. In terms of growth all the selected companies performed well, but they should try to improve their growth and expand their market.

CONCLUSION

The Airline companies in India are prone to financial distress because of many reasons. Aviation sector has already seen many bankruptcy filings in the world and it is already evident that in Indian Aviation Industry a well known Airlines company i.e. Kingfisher Airlines went bankrupt. The present study reveals that out of the selected Indian Airlines, the financial health of Indigo is very good and it is in safe zone. The Z score of other three companies reveal that these companies reveal a poor financial health and lie in the distress zone as measured through Z score model. These companies need to take necessary corrective measures to prevent them from possible bankruptcy.

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Table-1: Financial Health (Z-Score Model) of Select Indian Aviation Companies

Year	Indigo	Jet Airways	Go Airlines	Spicejet Ltd
2007	-	4.80	-	-0.16
2008	0.32	3.35	-	1.24
2009	6.20	3.48	-	-4.18
2010	7.84	3.75	-	-1.88
2011	7.26	1.10	-5.77	0.92
2012	4.97	-1.18	-13.46	-8.22
2013	5.78	-2.68	4.66	-1.79
2014	3.26	-5.53	1.96	-9.42
2015	5.05	-10.20	-4.11	-11.16
2016	6.55	-4.75	-4.09	0.086

(Source: calculation based upon data from www.acekp.in)

Table-2: Regression analysis showing Impact of Liquidity, profitability and efficiency on Z-score of Of Indigo

Descriptive Statistics			
	Mean	Std. Deviation	N
Z Score	5.2478	2.29142	9
Current ratio	1.4767	.79204	9
Return on equity	118.2078	124.60561	9

Receivables Turnover	2.0500	.55675	9		
Correlations					
	Z Score	Current ratio	Return on equity	Receivables Turnover	
Pearson Correlation	Z Score	1.000	.594	.301	-.141
	Current ratio	.594	1.000	-.232	-.186
	Return on equity	.301	-.232	1.000	.456
	Receivables Turnover	-.141	-.186	.456	1.000
Sig. (1-tailed)	Z Score	.	.046	.216	.359
	Current ratio	.046	.	.274	.316
	Return on equity	.216	.274	.	.109
	Receivables Turnover	.359	.316	.109	.
N	Z Score	9	9	9	9
	Current ratio	9	9	9	9
	Return on equity	9	9	9	9
	Receivables Turnover	9	9	9	9

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.787 ^a	.619	.390	1.78937

a. Predictors: (Constant), Receivables Turnover, Current ratio, Return on equity

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	25.996	3	8.665	2.706	.156 ^b
Residual	16.009	5	3.202		
Total	42.005	8			

a. Dependent Variable: Z Score

b. Predictors: (Constant), Receivables Turnover, Current ratio, Return on equity

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	3.460	2.921		1.184	.289	-4.049	10.969
	Current ratio	1.960	.825	.678	2.377	.063	-.159	4.080
	Return on equity	.011	.006	.587	1.866	.121	-.004	.026
	Receivables Turnover	-1.162	1.282	-.282	-.907	.406	-4.458	2.133

a. Dependent Variable: Z Score

Table-3: Regression analysis showing Impact of Liquidity, profitability and efficiency on Z-score of Of Jet Airways

Descriptive Statistics					
		Mean	Std. Deviation	N	
Z Score		-.7860	4.95789	10	
Current ratio		.6970	.48362	10	
Return on equity		5.0400	8.25445	10	
Receivables Turnover		27.5730	4.77453	10	

Correlations					
		Z Score	Current ratio	Return on equity	Receivables Turnover
Pearson Correlation	Z Score	1.000	.763	-.154	.576
	Current ratio	.763	1.000	-.176	.441
	Return on equity	-.154	-.176	1.000	-.250
	Receivables Turnover	.576	.441	-.250	1.000
Sig. (1-tailed)	Z Score	.	.005	.335	.041
	Current ratio	.005	.	.314	.101
	Return on equity	.335	.314	.	.243
	Receivables Turnover	.041	.101	.243	.
N	Z Score	10	10	10	10
	Current ratio	10	10	10	10
	Return on equity	10	10	10	10
	Receivables Turnover	10	10	10	10

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809 ^a	.654	.481	3.57182
a. Predictors: (Constant), Receivables Turnover, Return on equity, Current ratio				

ANOVA^A

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.678	3	48.226	3.780	.078 ^b
	Residual	76.548	6	12.758		
	Total	221.226	9			

a. Dependent Variable: Z Score

b. Predictors: (Constant), Receivables Turnover, Return on equity, Current ratio

COEFFICIENTS^A

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
Model		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-14.130	7.522		-1.879	.109	-32.535	4.275
	Current ratio	6.503	2.751	.634	2.364	.056	-.229	13.235
	Return on equity	.020	.149	.033	.134	.898	-.346	.385

	Receivables Turnover	.316	.283	.304	1.115	.308	-.377	1.009
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a. Dependent Variable: Z Score

Table-4: Regression analysis showing Impact of Liquidity, profitability and efficiency on Z-score of Of Go Air

Descriptive Statistics			
	Mean	Std. Deviation	N
Z Score	-3.4683	6.34769	6
Current ratio	.1850	.07893	6
Return on equity	.0000	.00000	6
Receivables Turnover	1.2717	.74679	6

Correlations					
		Z Score	Current ratio	Return on equity	Receivables Turnover
Pearson Correlation	Z Score	1.000	.483	.	.166
	Current ratio	.483	1.000	.	.400
	Return on equity	.	.	1.000	.
	Receivables Turnover	.166	.400	.	1.000
Sig. (1-tailed)	Z Score	.	.166	.000	.377
	Current ratio	.166	.	.000	.216
	Return on equity	.000	.000	.	.000
	Receivables Turnover	.377	.216	.000	.
N	Z Score	6	6	6	6
	Current ratio	6	6	6	6
	Return on equity	6	6	6	6
	Receivables Turnover	6	6	6	6

MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.484 ^a	.234	-.277	7.17320

a. Predictors: (Constant), Receivables Turnover, Current ratio

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.101	2	23.551	.458	.671 ^b
	Residual	154.365	3	51.455		
	Total	201.466	5			
a. Dependent Variable: Z Score						
b. Predictors: (Constant), Receivables Turnover, Current ratio						

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-10.493	8.503		-1.234	.305	-37.554	16.568
	Current ratio	39.842	44.335	.495	.899	.435	-101.252	180.936
	Receivables Turnover	-.272	4.686	-.032	-.058	.957	-15.185	14.641

a. Dependent Variable: Z Score

Table: 5 Regression analysis showing Impact of Liquidity, profitability and efficiency on Z-score of Of Spice jet

Descriptive Statistics			
	Mean	Std. Deviation	N
Z Score	-3.4564	4.57057	10
Current ratio	.5090	.27859	10
Return on equity	.0000	.00000	10
Receivables Turnover	3.9390	2.96178	10

Correlations					
		Z Score	Current ratio	Return on equity	Receivables Turnover
Pearson Correlation	Z Score	1.000	.621	.	-.612
	Current ratio	.621	1.000	.	-.707
	Return on equity	.	.	1.000	.
	Receivables Turnover	-.612	-.707	.	1.000
Sig. (1-tailed)	Z Score	.	.028	.000	.030
	Current ratio	.028	.	.000	.011
	Return on equity	.000	.000	.	.000
	Receivables Turnover	.030	.011	.000	.
N	Z Score	10	10	10	10
	Current ratio	10	10	10	10
	Return on equity	10	10	10	10
	Receivables Turnover	10	10	10	10

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.668 ^a	.446	.287	3.85889		
a. Predictors: (Constant), Receivables Turnover, Current ratio						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83.774	2	41.887	2.813	.127 ^b
	Residual	104.237	7	14.891		
	Total	188.011	9			
a. Dependent Variable: Z Score						
b. Predictors: (Constant), Receivables Turnover, Current ratio						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-4.484	5.456		-.822	.438	-17.386	8.418
	Current ratio	6.161	6.531	.376	.943	.377	-9.281	21.604
	Receivables Turnover	-.535	.614	-.347	-.871	.412	-1.988	.917
a. Dependent Variable: Z Score								

RISK OF VIOLENCE IN HEALTHCARE

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1. INTRODUCTION

Violence has always been a part of the human condition because of our sin nature (Rom.3:23). But modern families are exposed to even more violence than previous generations because of the media. Television has the potential to generate both positive and negative effects, and many studies have looked at the impact of television on society, particularly on children and adolescents an individual child's developmental level is a critical factor in determining whether the medium will have positive or negative effects. Not all television programs are bad, but data showing the negative effects of exposure to violence, inappropriate sexuality and offensive language are convincing .Still, physicians need to advocate continued research into the negative and positive effects of media on children and adolescents.

1.1 VIOLENCE THROUGH MEDIA

The amount of violence on television is on the rise .According to a study conducted an average child sees 12,000 violent acts on television annually, including many depictions of murder and rape. More than 1000 studies confirm that exposure to heavy doses of television violence increases aggressive behavior, particularly in boy's. Other studies link television or newspaper publicity of suicides to an increased suicide risk.

The following groups of children may be more vulnerable to violence on television:

- children from minority and immigrant groups;
- emotionally disturbed children;
- children with learning disabilities;
- children who are abused by their parents; and
- children in families in distress.

Physicians who see a child with a history of aggressive behavior should inquire about the child's exposure to violence portrayed on television.

1.2 OBJECTIVES

1. To know the sources of violence
2. What is known about the health consequences of exposure to domestic violence?
3. How to reduce / prevent workplace violence

1.3 Scope

The research would evaluate the risk of violence in healthcare by identifying the key factors. The research would involve Doctors, nurses, paramedics and supervisors as the participants who play the vital role in health care sector. The research would review various studies and theories in the same context . The focus of this research would be adhering to the objectives of the study in drawing conclusion based on data analysis. Finally the research would highlight the areas of the future research and would also draw attention towards the limitations faced

2. LITERATURE REVIEW**2.1 INTRODUCTION**

Several topics have been reviewed in this chapter as a background for the proposed study. One of the topic included is risk of violence in health care , which is been described as the background for the intended study in a summarized manner

For the Nation whose birth was inspired by the concept of non violence, it is indeed sad to note that violent behavior in our society is increasing.

As per National Crime Records Bureau (NCRB)report (2013), violent crimes have been steadily increasing.

A comparison of violent crimes committed in 2003 and 2012 that is after a gap of 9 years reflects the rise in crime as India urbanized rapidly during this period.

Violence is a serious problem these days we see a drastic increase in workplace violence .violence act include physical assaults and threats of assaults and also verbal assaults , this verbal assault can escalate to physical violence.

Physical force unlawfully exercised towards property or person causing damage or injury or covert threats are considered as the violence acts (business dictionary)

2.2 SCARY WORLD

Life has indeed become more violent and more dangerous for children. It's a scary world and children are exposed to more violence than any generation

Violence can be divided into three broad categories

1. self directed violence
2. interpersonal violence
3. collective violence

2.3 SELF DIRECTED VIOLENCE

Is defined by the World Health Organization as "the intentional use of physical force or power, threatened or actual, against oneself, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation," although the group acknowledges that the inclusion of "the use of power" in its definition expands on the conventional understanding of the word.

3. THE EXTENT OF THE PROBLEM

An estimated 815 000 people killed themselves in 2000 – a rate of 14.5 per 100 000 or roughly one death every 40 seconds. The highest rates of suicide in the world are found in Eastern European countries. The lowest rates are found mainly in Latin America and a few countries in Asia. Within countries, suicide rates are frequently higher among indigenous groups. In general, suicide rates increase with age. Rates among people aged 60 and older are about three times the rates among people 15-29 years of age. The absolute numbers are, however, higher among those below 45 years of age. Even though women are more prone to suicidal thoughts than men, rates of suicide are higher among men. On average, there are about three male suicides for every female one. Suicidal thoughts and attempts are common among young people. The ratio of attempts to completed suicides among people under 25 years of age may reach as high as 100–200:1. In general, about 10% of people who attempt suicide eventually kill themselves. (self directed violence (facts,WHO)

3.1 RISK FACTORS FOR SELF-DIRECTED VIOLENCE

A variety of stressful events or circumstances can put people at increased risk of harming themselves including the loss of loved ones, interpersonal conflicts with family or friends and legal or workrelated problems. To act as precipitating factors for suicide, though, they must happen to someone who is predisposed or otherwise especially vulnerable to self-harm.

Predisposing factors include:

- alcohol and drug abuse
- a history of physical or sexual abuse in childhood
- social isolation
- Psychiatric problems such as mood disorders, schizophrenia and a general sense of hopelessness.

Other significant factors include:

- Having access to the means to kill oneself (most typically guns, medicines and agricultural poisons)
- Physical illnesses, especially those that are painful or disabling
- Having made a previous suicide attempt.

3.2 Preventing self-directed violence

TREATMENT OF MENTAL DISORDERS

The early identification and appropriate treatment of mental disorders is an important prevention strategy – especially given the relevant contribution of depression and other psychiatric problems to suicidal behavior. Equally important is early identification and treatment for people with alcohol and substance abuse problems.

BEHAVIORAL APPROACHES

People who are suicidal generally express difficulty in solving problems. Behavioral therapy approaches are designed to probe underlying factors and to help patients develop problem-solving skills. While conclusive answers are not yet known, there is some evidence to suggest that behavioral therapy approaches are effective in reducing suicidal thoughts and behavior.

SOCIAL AND ENVIRONMENTAL STRATEGIES

A major factor determining whether suicidal behavior will be fatal or not is the method chosen. Shooting, jumping from a height and hanging are among the most lethal methods of suicide. Reducing access to the means of self-harm is thus an important prevention strategy and one that has proved effective. Notable reductions in suicide have occurred, for instance, in countries that have removed carbon monoxide from domestic gas and car exhausts or restricted access to concentrated agricultural poisons among people. Restrictions on the ownership of firearms has been associated with a decrease of their use for suicide.(violence prevention WHO)

3.3 INTERPERSONAL VIOLENCE

Interpersonal Violence (IPV) is the intentional use of physical force or power, threatened or actual, against a person or group that results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation. IPV can be committed by a person who is or has been in a romantic relationship, spouse or partner, family member, cohabitant, or household member

3.4 COLLECTIVE VIOLENCE:

collective violence consists of a number of persons directing injurious force against others. Acts of collective violence do not spring from madness, perversion, or intentional criminality; they spring from everyday life issues, and the people who commit these acts are normal people who become convinced that the time has come to take matters into their own hands.

Generally speaking, collective violence can be divided into three categories:

1. *Situational collective violence* is unplanned and spontaneous. Something in the immediate situational environment triggers a group to violent action. For example, in a barroom brawl, one group of patrons interprets messages sent by another group as a form of disrespect and feels it necessary to retaliate physically.
2. *Organized collective violence* is planned violent behavior. It is also unauthorized or unofficial and lacks government approval. Lynching is an example of organized collective violence.
3. *Institutional collective violence* is carried out under the direction of legally constituted officials. Examples include a country fighting a war, a state's National Guard putting down a riot, or a SWAT team attacking a barricaded suspect.

3.5 VIOLENT ACTS CAN BE

1. physical
2. sexual
3. physiological and
4. emotional

As per National Crime records Bureau (NCRB) report (2013) , violent crimes committed in 2003 and 2012 reflects the rise in crime as India urbanized rapidly during this period.

Globally violence resulted in 1.28 million deaths in 2013 out of which 8,42,000 were attributed to self harm , 4,05,000 interpersonal violence and 31,000 to collective violence in Africa.

4. VIOLENCE IN HEALTH CARE

Violence is defined by the world Health Organization as the “intentional use of physical force or power, threatened or actual against oneself another person or against a group or community, which either results in or has a likelihood of resulting in injury, death, physiological harm mal- development or deprivation (Wikipedia.org)

Workplace violence has become an alarming phenomenon worldwide. Health sector personnel are particularly at risk of violence in their workplace. Violence finds its expression in physical assault, homicide, verbal abuse, bullying/mobbing, sexual and racial harassment and psychological stress. Violence does not only occur as one single incident, but also may be expressed in repeated small incidents which together create severe harm.

The problem of violence against Doctors is not specific to India, reports say that physicians from other neighboring countries face the same problem. Not too long ago, there was a time when doctors in Asia were bestowed upon a divine status. Rural and urban peoples alike, revered medical personnel and blindly trusted them with the lives of their loved ones. Alas... times have changed and how! The current situation is an alarming one. It speaks of rising incidents of violence against doctors, with some ending in fatal outcomes. According to an ongoing study by the Indian Medical Association, more than 75% of doctors have seen violence at work. National newspapers constantly report doctors being abused, bullied, manhandled and even killed by the patient's relatives.

The problem is multi-factorial in origin. Over the past two decades, the Indian subcontinent has witnessed an economic boom. So much so, that the Socialistic fabric of the region laid down by Gandhi has slowly changed to a Capitalistic one. With the rise of corporate hospitals, the mentality of physicians has changed from a charitable to a lucrative one. Though not necessarily deleterious, this change has drastically influenced people's perception of physicians. Earlier even when there used to be one medical officer for an entire village or a small district, people's trust in the doctor remained high. The doctor was regarded as part of the local community and was integral to the health and well being of the social unit. With commercialization of health, more and more physicians have migrated toward corporate settings in urban centers, where large number of patients feel like a fish out of water. The rift between the educated class and the labor class of India has never been wider. The burgeoning intellectual class of doctors has become alienated from the grass root society.

Trust in the doctor-patient relationship has taken a beating over the last few decades. In earlier times, people went into the medical profession for the predominant objective of serving ailing mankind, and thus were viewed as saints. Over time with medical care commercialization, some physicians were accused of being driven by greed and of adopting unethical practices. The ever hungry media rapidly jumped to conclusions and published sensational stories of organ theft, medical negligence and malpractice. Furthermore, reports of unnecessary tests and needless invasive procedures have caused patient distrust to grow.

Government hospitals in India follow the welfare model, as majority of people are poor and do not have health insurance. Such hospitals offering subsidized medical care are swamped with patients and their attendants. The average medical officer posted in the outpatient department, sees close to 350 patients a day. It is logical to assume that quality of care gets sometimes compromised while attending to such a huge number of patients in a small window of time. This may impart a perception of neglect to the patient and leave him/her only partially satisfied. After waiting in long lines for hours, some patient's attendants are already at the brink of an emotional cliff. Ineffective communication or delay in attending to a patient can easily drive them over the edge. Since most patients lack health insurance, sometimes the diagnosis comes as a financial disaster and shocks them into emotional turmoil. This results in displacement of anger toward the physician.

The highest number of violent incidents (close to 50%) occurs in the ICU and almost 70% are caused by relatives of patients. Miscommunication by physicians causes attendants to have unrealistic or too high expectations for patient recovery. Hence it is important to emphasize the patient's prognosis to the attendants in a lucid manner. As a doctor trained in India, I can say that Indian medical schools are excellent in imparting medical training to their students; however teaching to be empathetic toward the patient is seriously lacking. Young doctors fresh out of medical school are often not empathetic enough with the attendants, leading to a sense of perceived neglect. This is often the trigger of violent assaults.

Most government hospitals in India lack adequate security personnel. During night hours, it is often the medical officer who plays the role of the doctor, as well as that of the security guard. There is no established protocol for tackling violence or a shooting incident. Most of the police force is plagued by corruption and is prone to bribery. Hence relying on the police for safety is more often than not, useless. The common public has complete lack of faith in the judicial system and feels it is only the rich who obtain justice. Thus in instances of patient death, people believe in exacting immediate revenge, seeking their '*pound of flesh*' using physical means rather than filing a case in court.

There exist no laws for the protection and safety of the medical community. While it is a non-bailable offense to assault a uniformed public servant like a bus driver or a policeman, there is no distinct penalty for hitting an on-duty physician in a white coat. The public is cognizant of this phenomenon and feels no apprehension in manhandling a doctor. Since such acts of violence go unpunished regularly, it emboldens the mob and encourages the occurrence of the next incident.

Indian media has played a major role in demonizing doctors with the objective of selling news. Journalism has become increasingly competitive and blaming doctors sans proof has become commonplace. In addition to

selling papers, this brand of yellow journalism sells a negative image of the medical community. Since it might be callous to pin the blame on the patient or the attendants, Indian media outlets find it sensational to scapegoat the physician, thereby causing the public to embark on a frenzied witch hunt. Such scandal mongering has sowed seeds of distrust and skepticism deep in the minds of the people.

Politics in India is dominated by sectarian groups with religious or quasi religious agendas. Some separatist party leaders feel no shame in publicly castigating physicians. In fact, a common method of gaining political mileage and securing the vote of the local community, is marching in a government hospital with the patient, and publicly manhandling the doctor. Such brazen acts are emboldened by a corrupt judiciary and a systemic failure of the law.

The problem of violence against doctors is not specific to India. In China, physicians are struggling with the same issue. Reports of physician assault cases are rising in Pakistan and in Nepal. Palestine conducted a cross sectional study to assess its own problem. Physicians in Turkey are no strangers to violence as well.

Though the current scenario seems gloomy, tackling the problem requires physician participation. Doctors should work with the government in creating an effective strategy to prevent hospital violence. Security personnel should be posted at the entrance of every hospital and should not let anyone through without checking for appropriate identification. Weapons should be confiscated before allowing passage to anyone. All attendants must register at the front desk and be given a visitor badge to be worn at all times. No more than two attendants should be allowed with the patient. Laws against doctor assault should be displayed on the walls. To ensure doctor safety, every hospital should create an emergency protocol and an evacuation plan in case of a major act of violence.

The importance of teaching empathy to budding doctors cannot be stressed enough. Proper and effective communication with the patient and the attendants is an art, and should be taught to all young doctors. William Osler famously said, *“The good physician treats the disease; the great physician treats the patient who has the disease”*.

In emergency and ICU settings, doctors should take time to clearly explain patient prognosis to attendants who may harbor unreasonable expectations. Counselors for emotional support should be available. Language translators can help in reducing chances of miscommunication. Since India is a Republic, The Rule of Law should prevail. Mobocracy cannot be allowed to raise its ugly head. Law should be enacted to safeguard the safety of doctors and nurses. Assaulting medical personnel on duty should be made a cognizable offense, with serious consequences. The media is the window of society. Demonizing physicians should be avoided and convicting doctors should be left for the courts.

Violence in any form and in any setting is reprehensible. However, acts of violence in a hospital are the most extreme and should be dealt with an iron hand. Hospitals are sanctums of healing and recuperation. In addition to jeopardizing the safety of medical personnel, violence threatens patient safety and hampers their recovery to health. For the good of the Indian society, doctors rather than turning a cold shoulder, should work in tandem with the government as well as the public, to tide over this crucial problem.

4.1 Workplace violence risk factors vary by healthcare setting, but common factors include the following:1

- Working with people who have a history of violence or who may be delirious or under the influence of drugs
- Lifting, moving, and transporting patients
- Working alone
- Poor environmental design that may block vision or escape routes
- Poor lighting in hallways or exterior areas
- Lack of means of emergency communication
- Presence of firearms
- Working in neighborhoods with high crime rates
- Lack of training and policies for staff
- Understaffing in general, and especially during meal times and visiting hours

- High worker turnover
- Inadequate security staff
- Long wait times and overcrowded waiting rooms
- Unrestricted public access
- Perception that violence is tolerated and reporting incidents will have no effect

4.2 Association of Violence and adverse health outcomes

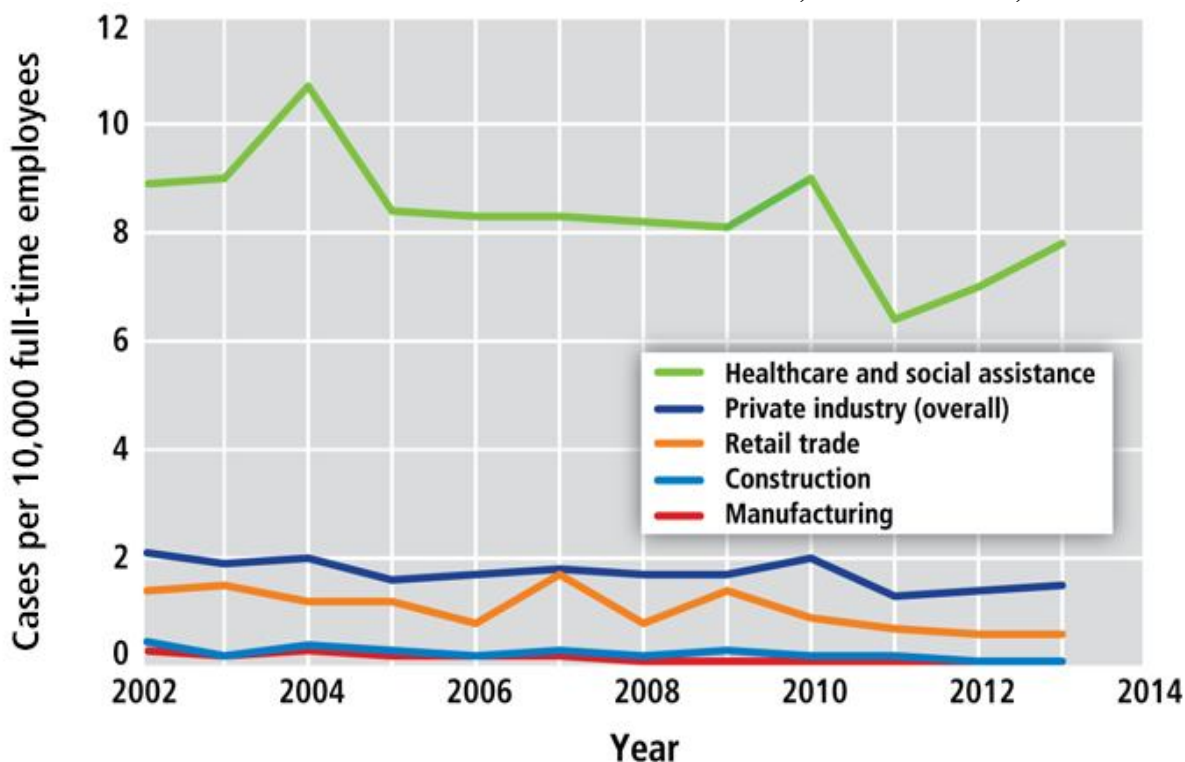
Injury and physical symptoms:-

- Bruises
- fractures
- bone dislocations
- Head/neck/abdomen/pelvic injury
- Chronic body pain
- Shortness of breath
- Loss of appetite

Chronic health conditions

- Asthma
- High cholesterol
- High blood pressure
- Cardiovascular disease
- Gastrointestinal disorders

VIOLENT INJURIES RESULTING IN DAYS AWAY FROM WORK, BY INDUSTRY, 2002–2013



Data source: Bureau of Labor Statistics data for intentional injuries caused by humans, excluding self-inflicted injuries.

5. DATA ANALYSIS AND INTERPRETATION

Gender * 25.Comfortable with the different shifts and schedules of work

H0: There is no significant association between gender and their opinions on comfortable with the different shifts and schedules of work

Crosstab								
			25.I am comfortable with the different shifts and schedules of work					Total
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Gender	Male	Count	18	30	55	30	13	146
		% within Gender	12.3%	20.5%	37.7%	20.5%	8.9%	100.0%
	Female	Count	19	52	66	20	20	177
		% within Gender	10.7%	29.4%	37.3%	11.3%	11.3%	100.0%
Total		Count	37	82	121	50	33	323
		% within Gender	11.5%	25.4%	37.5%	15.5%	10.2%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.508 ^a	4	.111
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.92.			

From the above table chi square is not significant (sig. value is > 0.05), no evidence to reject null hypothesis. It means that there is no significant association between gender and their opinions on comfortable with the different shifts and schedules of work

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.152	.111
	Cramer's V	.152	.111
N of Valid Cases		323	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

The strength of association between gender and their opinions on comfortable with the different shifts and schedules of work is 0.152

Gender * 30. Work in shifts, have problems with the way the shifts are managed

H0: There is no significant association between gender and their opinions on work in shifts problem with the way the shifts are managed

ay the shifts are managed

Crosstab								
			30.I work in shifts,I do have problems with the way the shifts are managed					Total
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Gender	Male	Count	14	3	58	56	15	146
		% within Gender	9.6%	2.1%	39.7%	38.4%	10.3%	100.0%
	Female	Count	13	0	54	86	24	177
		% within Gender	7.3%	0.0%	30.5%	48.6%	13.6%	100.0%
Total		Count	27	3	112	142	39	323

	% within Gender	8.4%	0.9%	34.7%	44.0%	12.1%	100.0%
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Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.700 ^a	4	.069
a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.36.			

From the above table chi square is not significant (sig. value is > 0.05), no evidence to reject null hypothesis. It means that there is no significant association between gender and their opinions on work in shifts problem with the way the shifts are managed

Symmetric Measures			
		Value	Approx. Sig.
Nominal by Nominal	Phi	.164	.069
	Cramer's V	.164	.069
N of Valid Cases		323	
a. Not assuming the null hypothesis.			
b. Using the asymptotic standard error assuming the null hypothesis.			

The strength of association between gender and their opinions on work in shifts problem with the way the shifts are managed is 0.164

FUTURE RESEARCH

Future research on workplace violence within O&P should include prevalence surveys as well as a survey about the effects of workplace violence. Narrative description of incidents and validated outcome measures should also be incorporated into the research. Studies like this could be used to make students and practitioners aware of the signs and triggers for aggressive behavior, as well as provide recommendations for implementing security and safety measures. Clinical education programs should include education on workplace violence prevention and recovery strategies.

DISCUSSION

This review demonstrates sufficient evidence that workplace violence perpetrated by patients has a negative effect on the healthcare worker as well as the quality of care they can provide to future patients.

6. CONCLUSION

The evidence is clear that violence is widely prevalent and a critical health issue with immediate, short, and long-term health effects including injuries and chronic health, mental health, and substance abuse conditions. violence not only affects survivors but also their families, in particular children who witness abuse. Emerging research is beginning to uncover the complexity of the relationships between violence mental health outcomes, substance abuse patterns, and other socio-economic stressors.

There is evidence that violence by patients against healthcare professionals has detrimental effects on the providers as well as the care future patients will receive. More research is needed in the allied health professions to improve education about the triggers, effects, and coping methods in that sector of healthcare. O&P practitioners can be placed in similar situations as other healthcare workers, and this research would guide the education of students and practitioners regarding how to remain safe while providing high quality care.

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MODERN TRENDS IN CAREER PLANNING WITH REFERENCE TO TODAY'S VUCA WORLD

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Career to an ordinary person means a profession or an occupation. It's a progression of one's professional life. For some it could also be a livelihood.

Career Planning for any individual is a life long process. It includes choosing an occupation, getting a job, growing in that job, possibly changing careers and eventually retiring. This article focuses on the importance of career planning and prerequisites of a successful career plan. In today's competitive world it is not the matter of survival for an individual, instead it is the matter of reaching the topmost level in less time. And for that a person has to be aware of the measures he needs to put in order to make it to the top. The perception of a career may be different to different groups of people. For instance, a student's perception of career may be just getting a job after completing his studies where as for an Executive it could be becoming the CEO of the company. In the initial stages when the person has to choose a career he must be very careful as his choice will determine his future and in order to do this effectively a career strategy must be formulated. A career strategy may involve the following steps:

- Preparation of a personal profile:
By preparing a personal profile a person tends to understand himself better. In fact he should rather ask himself questions that relate to his attitude, whether he is an introvert or an extrovert and what is his attitude towards his work, material thinking and change.
- Developing Long term Personal and professional goals:
It is obvious that no flight plan can takeoff with out a flight plan including the destination. It is proved that people often avoid career planning because they have to take decisions. By choosing one goal the person usually gives up the opportunities to pursue others. The mere apprehensions and level of awareness about the business and economic environment may jeopardize one's attempts of a career plan.
- Goal setting:
By understanding the factors that inhibit goal setting one can take steps to increase commitments. First when the setting of performance goals become a part of the appraisal process, identifying career goals becomes easier. Moreover one does not set career goals all at once, rather goal setting is a continuous process that allows flexibility; Professional goals can be revised in the light of changing circumstances. Another factor that reduces resistance to goal setting is the integration of long-term aims with more immediate requirement of action.
- Analysis of personal strengths:
Self-appraisal is something, which is extremely important for any career plan. For a successful career planning, the environmental opportunities and threats must be matched with the strengths and weaknesses of individuals categorized as technical, human conceptual or design. The relative importance of these skills differ from various positions from the organizational hierarchy, with technical skills being very important on supervisory levels, conceptual skills being very important for managers and human skills being very important at all levels.

The next question that comes into the mind of an individual is, How far should one plan in advance? It states that planning should cover a period of time necessary for fulfillment of commitments involved in the decision made today. The duration of a career plan should be in perfect correlation with external factors like economy of the environment and internal factors like competency building, etc.

Career planning is much more than partnering with clients to discover what they want to be "when they grow up". Effective career planning begins with effective thought provoking assessments that help career changers identify viable career choices- that is realistic choices that take into account one's career values, transferable and marketable skills. In the process of planning one's work life evaluating abilities and interests is involved. Considering alternate career opportunities, establishing career goals and planning practical development activities also plays an important role.

With Globalization prevailing the world over, each individual has been given a number of opportunities to fulfill his dreams. But in order to encash these opportunities one has to realize his dreams and work towards achieving them and for this a career plan lays the foundation. The more effective the career plan the more opportunities can be scanned. With more and more companies coming up in India the career opportunities for

each individual have multiplied. The growing number of BPOs in India is providing direct employment as well as indirect employment to the people here. The entire work culture of the people has changed to such an extent that career goals occupy top priority in preference to other prerequisites like personal comfort, Leisure. The western world found in India in general and Hyderabad in particular as the main source for talent in various fields to serve this establishment the world over. These BPOs are a result of Globalization. In the Early 1990's the economy was in a bad condition where in most of the people had to think of the survival in a job rather than planning a career. But with the impact of Liberalization, Privatization and globalization today every person has an equal opportunity to prove his competencies and grow to the highest level. But for this again a career plan is important.

Preparing a career plan is no less than formulating a strategy where a person should keep the following points in the mind.

- Self Assessment
- Explore information
- Explore Opportunities
- Make Decisions
- Action Plan
- Audit Results

SELF- ASSESSMENT

- Process of gathering information about self in order to make an informed career decision
- What are one's motivating skills, interests and values?
- What new learning does a person wants?
- What work life role does a person wants?
- Which work environment is a person most suited to?

EXPLORE INFORMATION

- Process of assessing the data gathered about self and exploring it with an open perspective.
- How does one consolidate his self assessment information?
- How does one use his self assessment data to develop options?
- Are the compatible with one's lifestyle
- Does a person has any barriers/ constraints at this point?

EXPLORE OPPORTUNITIES

- Gathering career information which includes – employment outlook, salary, education, training and job duties.
- What work life options are available to a person
- Who can one ask for guidance?
- How can one check his work life options?

MAKE DECISION

- Process of decision making for future career option
- Has the technique been adopted by me for deciding on my career option?
- Who will listen to me and assess me with my decision making?

ACTION PLAN

- Develop the steps needs to take in order to reach your goals
- Has one planned what he needs to do now and later
- What support is available to a person to assess him in making it happen?

- How does one market himself
- What should I put in my resume?
- Does a person's interviewing and negotiating skills need improvement?

AUDIT RESULTS

- By working through the earlier steps develop a better understanding of one's career situation and audit the results.
- Has one's expectations being met?
- Are the results beneficial to one?
- What can one do to retain the benefits?
- What has one learnt from the transition process?

Most of the top class MNCs concentrates on career plan of their employees. An effective career plan always gives a professional zeal to the employer and he is considered an "A Player". Career plan also includes a **Contingency plan**. A person may have a career plan to do something but the external factors like the circumstances may force him to enter some other field. So a career plan has to be flexible where in the contingency factor has an important role to play

"An important input in the career plan is capabilities to perform as otherwise, the career plans will be defeated"

The need for planning a career has always been an important area of concern for every professional. In these times of recession where the entire economy is in a threat.. Every individual has to plan his career in an efficient way. Every move a person makes should be only towards achieving his goals.

Following are the important objectives of an effective career plan:

- To make a right choice of career:
It is very important for an individual to make a right career choice as this forms the basis of his life and his career choice should be made keeping all the factors in mind. The interest of an individual to choose a career depends on different factors. One of them could be getting recognition for himself. When a career is made by choice there is always more scope in it than a career made by chance. And to make a right career choice self assessment plays an important role. One has to analyze himself properly before choosing a career. A person may like to be in one profession but his personal abilities may not be suitable so, he needs to analyze this factor and keep in mind what are his strengths and weaknesses and accordingly move forward to choose a right career.
- Sustain in that career:
Another important objective of a career plan should be sustaining in the chosen career. There are instances where a person chooses a career but situations make him leave that particular career and go for another career. One who has sustained in the career he has chosen for himself can be called as a real career planner. Sustaining in a particular career initially could be a matter of survival for an individual but in later stages this lays a foundation to an effective career planning. One may start his career as an x level employee but his zeal can make him reach to the xⁿ level in less time. And for this an individual should frame certain strategies to sustain in that career. These strategies may include Developing a passion for that career, Develop competencies to sustain in that career.

"For the first time in history the world's wealthiest person is a knowledge worker"

The next important strategy is developing a peer group support, Peer group competitions can also help a person develop his competencies and sustain in that career. These are some of the strategies where in the person can help himself by sustaining in a career he has chosen for himself.

GOAL ACCOMPLISHMENT

This can be called the final stage of a career plan where the ultimate target of an individual is attained. This is a stage of "Self Actualization" according to Maslow's theory of hierarchical needs. The ultimate goal of an individual could be to see himself at the highest level possible for which one has been working hard throughout his life.

Every individual should have a career objective at every stage of his career. When one is a student it is important for him to know, what would be his career when he completes his education in terms of designation and when his first career goal is achieved he should immediately provoke himself in thinking the next career goal and likewise, at every stage of his career he should set the goals and audit the results. When he thinks that the set goal cannot be achieved the need for contingency plan arises. The purpose of a career goal is to take a person a step forward in his career and when this goal remains unachieved a contingency plan must be made where in the purpose should remain the same. The goal of an individual can be achieved by following certain steps where in the smart work plays an important role. A person who is at the top level usually is assigned with responsibilities where he needs to use his intellectual capital. That is there has to be smart work which is in correlation with hard work, internal and external abilities should be assessed and a defense mechanism strategy must be formulated for himself.

If an individual has a goal then he needs to be clear about it and start walking towards it. He will learn along the way. He will acquire skills and competencies that will help him along. The important thing is to start the journey

Career planning is an exercise that is well worth the time invested in it because it sets AN individual going on the path that leads to where one would like to go. This exercise provides a person with a lot of clarity regarding his career objectives as well and it is best done before one embark on his job search. Often most people get stuck at the very beginning of the planning process itself. There seem to be too many choices that are throwing themselves at a person with all kinds of material gains, fame and wealth, comfort and luxury, glamour and beauty. From acting to singing, writing to banking, software programming to business, choices confuse an individual. Naturally feelings of self-doubt might creep in at this stage. Am I good enough for that, an individual may ask, or how do I become successful at this. After some time of pondering over many career paths he may end up thinking that maybe he is no good for any of these things after all.

Here is where a bit of career planning helps. There are two ways of starting off. One is to find out what a person really likes doing and do it irrespective of the gains and growth patterns and the second is to find out what really motivates an individual, find out which among the careers gives a person what he wants and build up competencies for it. Either way an individual will get what he want - in the first method the journey itself is an individual's reward and in the second one is carefully working his way to his reward which could be clearly spelt out to be a consequence of his work or occupation.

Whichever path an individual chooses, it is most important to know his individual strengths and weaknesses. He needs to sit down and assess himself honestly. One needs to think of all his accomplishments, of all the compliments he got, of all the work that really inspired him, of the times when he worked with passion at and jot them all down. He will find that as he notes down his victories, his achievements etc a pattern will emerge. One can find that he is good at organizing, at making people comfortable, at leading, at solving puzzles, at physical activity, at playing music or games. Each of these represents a career option by itself or throws up some characteristic in him - qualities that could be good assets in his future career options.

Now list out things that motivate him that he aspires for, one's dreams - things he would want more than anything else in the world.

Based on an individual's aspiration level and his aptitude, one can also identify the careers that offer the kind of lifestyle or returns that he wishes. If one wishes to frequently travel and be in command of a dynamic business he can zero down to careers in marketing with a goal to set up his own firm or to head a large company. It is best to be honest with one self at this stage because most people take decisions based on glamorous misconceptions about certain careers and later change them. For example if one wishes to be an airhostess, check out the sources available to the kind of work that is associated with being an airhostess. Only if one really enjoy doing that kind of work and the rewards that come with it must be opted for it. Else he should look further for what really fits him. Growth, rewards, recognition and most importantly job satisfaction and a good quality of life come from one thing -loving one's job.

Having decided on a particular direction, build competencies. Specific careers need specific education and training. Whichever area one chooses to be in, he will fare well if he strive to be the best in it.

All careers without exception would certainly require a good writing and verbal communicating ability so please work on that, a pleasing and well-mannered personality, a professional work ethic and good interpersonal skills. Work on these important soft skills along with as one plans his career.

If an individual has a goal then he needs to be clear about it and start walking towards it. He will learn along the way. He will acquire skills and competencies that will help him along. The important thing is to start the journey.

Career planning is not an activity that should be done once -- in high school or college -- and then left behind as an individual move forward in his jobs and careers. Rather, career planning is an activity that is best done on a regular basis -- especially given the data that the average worker will change careers (not jobs) multiple times over his or her lifetime. And it's never too soon or too late to start one's career planning.

Career planning should be a rewarding and positive experience. Here, then, are steps to help an individual achieve successful career planning.

1. **Make Career Planning an Annual Event** subject to review and revision By making career planning an annual event, an individual will feel more secure in his career choice and direction -- and he'll be better prepared for the many uncertainties and difficulties that lie ahead in all of his jobs and career.
2. **Reflect on Your Likes and Dislikes, Needs and Wants** Change is a factor of life; everybody changes, as do our likes and dislikes. Something we loved doing two years ago may now give us displeasure. So always take time to reflect on the things in your life -- not just in your job -- that you feel most strongly about.

Make a two-column list of your major likes and dislikes. Then use this list to examine your current job and career path. If your job and career still fall mostly in the like column, then you know you are still on the right path; however, if your job activities fall mostly in the dislike column, now is the time to begin examining new jobs and new careers.

Finally, take the time to really think about what it is you want or need from your work, from your career. Are you looking to make a difference in the world? To be famous? To become financially independent? To effect change? Take the time to understand the motives that drive your sense of success and happiness.

3. **Examine Your Pastimes and Hobbies** Career planning provides a great time to also examine the activities you like doing when you're not working. It may sound a bit odd, to examine non-work activities when doing career planning, but it's not. Many times your hobbies and leisurely pursuits can give you great insight into future career paths.
4. **Make Note of Your Past Accomplishments** Most people don't keep a very good record of work accomplishments and then struggle with creating a powerful resume when it's time to search for a new job. Making note of your past accomplishments -- keeping a record of them -- is not only useful for building your resume, it's also useful for career planning.
5. **Look Beyond Your Current Job for Transferable Skills** Some workers get so wrapped up in their job titles that they don't see any other career possibilities for themselves. Every job requires a certain set of skills, and it's much better to categorize yourself in terms of these skill sets than be so myopic as to focus just on job titles.
6. **Research Further Career/Job Advancement Opportunities** One of the really fun outcomes of career planning is picturing yourself in the future. Where will you be in a year? In five years? A key component to developing multiple scenarios of that future is researching career paths.

Of course, if you're in what you consider a dead-end job, this activity becomes even more essential to you, but all job-seekers should take the time to research various career paths -- and then develop scenarios for seeing one or more of these visions become reality. Look within your current employer and current career field, but again, as with all aspects of career planning, do not be afraid to look beyond to other possible careers. **Final Thoughts on Career Planning** Don't wait too long between career planning sessions. Career planning can have multiple benefits, from goal-setting to career change, to a more successful life. Once you begin regularly reviewing and planning your career using the tips provided in this article, you'll find yourself better prepared for whatever lies ahead in your career -- and in your life.

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APPLICABILITY OF GST ON RESTAURANTS – BILLS, TAX RATES AND SERVICE CHARGES IN INDIA

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ABSTRACT

India earlier followed indirect tax(hereafter, levy and cess, as appropriate) which include excise, VAT, CVD etc collected by the states and service cess by central government. Thus the whole indirect tax system be decentralised. Eventually it realised in the direction of this indirect system was actually a burden on duty payers since it also collected tax on tax (levy) also known as cascading effect. thus to eliminate such double cess implementation system and bring all types of duties in one regime India took a major step in indirect levy system by implementing GST i.e. goods and service levy. Different cess rates are applicable to different sectors wherein here we will analyse the cess rates applicable to restaurants services its pre and post impact on bills and benefits availed or not under GST regime.

Keywords: GST Restaurants, Tax Rates

INTRODUCTION

India earlier followed indirect duties which include excise levy VAT, CVD etc. which was collected by the state government and service tax was in hand of central government. Eventually it realised that this indirect system was actually a burden on tax payers as it also collected tax on tax which is also known as cascading effect. thus to eliminate such double taxation system and bring all types of taxes in one regime India took a major step in indirect tax system by implementing GST i.e. goods and service tax the most important thing for a common man to refresh himself from his daily routine life is to have a lunch or dinner with their loved once or to visit some place nearby. When we talk about restaurants first thought that comes in our mind is food which is also affected under GST eg. frozen vegetables dry plants herbs etc. at 5% fruits and vegetable juices dry fruits at 12% items preserved by vinegar or acetic acid or sugar or items preserved by other mean fruit jam etc. at 18%. in earlier tax system goods with 12% to 18% tax rates be charge by only 5% showed a price hike for the ultimate consumers.

LITERATURE REVIEW

Aswathy Krishna and Divya. M. S. Ashish C.I in their study have reviewed about hotel business along with concluded that companies who are in food and beverage industry are the major beneficiaries of gst1 after the incorporation of GST goods services tax (in India everyone had keen interest about knowing how the new system will work, how will affect their routine life their responsibilities along with cost calculations, various matters and services.¹

Poonam 2017 talked in her study about the pre and post effect of implementation of GST and earlier cess system. Implementation of GST will eliminate cascading and double taxation effects and will encourage the economic growth in²

Kawle, et. al, reveals GST: An economic overview: Challenges and Impact ahead. Once the GST system is applied there would be single duty system which would record a significant development in comprehensive indirect taxation reform. Under the GST system there would be only on rate applicable for both goods and services. GST will create a business friendly environment, as prices will fall and it would also control the inflation rates.³

K.Rahmath Nisha K.Mohamed Jasim A. Keerthika 2017 in their paper they studied the impact of GST on hotel industry on south Tamilnadu to find out the positive and negative impact of GST in hotel industry in Trichy city by using different statistical data and concluded that there is more of a positive impact on hotel industry in south tamilnadu.⁴

GSTON RESTAURANT BILL

Before GST no one was bothered on what amount of duty is being paid by us on the restaurant bills and other consumables. But after GST everyone is conscious about the amount of duty levied and paid by them on the goods or services consumed because earlier we were used to pay duty since its inception but under GST we are adapting the change which is making us more conscious as every time it is compare with the previous cess system.

In old cess system the following items were the forming part of our restaurant bill

1. Service cess charged on service provided – 6%
2. VAT charged on food value of bill – 14.5%
3. Earlier service charge (10%) was also added by some restaurants which was for their own profit and does not go to government
4. Krishi Kalyan cess
5. Swachh Bharat Cess

So from above data we can say that before GST we ended up paying round about 20%, and more if include 10% service charge by restaurants. Service charges are voluntary for customers and are not banned by the government as if the customer likes the service as a tip he can give the service charges and can also deny for the same.

GST has replaced all this duties with just a single duty which is applicable on the total cost of food consumption which is as below

GST RATES FOR SERVICES

Services	GST Tax Rates (%)	Old Tax Rates (%)
Non AC/alcohol-serving restaurants	5 (2.5% CGST and 2.5% SGST)	13-14
AC, alcohol-serving restaurants	5 (2.5% CGST and 2.5% SGST)	22
Five-star restaurants	18 (9% CGST and 9% SGST)	18

EFFECT ON END USERS

Now as GST has implemented, we will pay single duty GST (CGST and SGST) in our bills instead of other multiple duties. But at many places we still see service charges of 10% included in the bill amount along with GST. One should note that such tax is charged by the restaurant and not the government, which means the amount so collected from us, is directly gone to the pocket of restaurant and not government. So it is voluntary in nature.

Let us understand it with an example.

BEFORE GST

Let's assume that we had a dinner in an air conditional restaurant (serving alcohol) which total amounted to Rs. 2,000. If it also adds service charges (10%) (Not the tax), our total bill becomes of 2,200. The actual duty will be levied on this value.

1. Food amount :	2,200.0
2. Service Tax 6% :	132.0
3. VAT 14.5% :	319.0
4. Krishi Kalyan 0.2% :	4.4
5. Swachh Bharat Cess 0.2%:	4.4
Total :	2659.8

AFTER GST

1. Food amount :	2,200.0
2. GST5% :	110.0
(CGST2.5% 55 & SGST2.5% 55)	
Total :	2310.0

So from the above example we can see that we save almost Rs. 350 after implementation of GST. We can say that GST has reduced the duty burden on customers as compared to previous tax system, so it's a win situation for the end users.

EFFECT ON RESTAURANTS

The most beneficial point for the restaurant owners in GST is the Input Tax Credit which they will be able to claim against the duty paid by them on groceries etc. purchased by them from registered manufacturers and/or dealer. Earlier tax regime was not providing such ITC options.

ITC mechanism and day by day reduction in GST rates by the government is reducing the duty burden on the owners and increasing their amount of working capital.

Although GST seems to be a Win – Win situation for both the Consumer as well as the Restaurant owner, there are still some restaurant owners who are misguiding the consumers and charging more duty on name of GST.

Therefore, there are some check points which should be kept in mind while settlement of bill.

POINTS TO BE KEPT IN MIND FOR RESTAURANTS OF FOOD BILLS

1. Service Charge

Most of the restaurants include service charge in the bill itself which is not levied by the government so it is on us whether we want to pay the charges or not, as it is voluntary one can refuse the same.

2. Rates applicability

One should know the GST rates applicable on different types of restaurants and hotels services in India.

3. CGST& SGST

GST is distributed among two category i.e. CGST and SGST equally on the % of duty we pay as GST i.e. half is paid to the central government (CGST) and remaining half the state government (SGST), this does not mean that we are paying double taxation.

4. Restaurant not eligible to charge GST

- ✓ Non-GST registered restaurants and/or restaurants with an annual turnover of less than 20 lakh. A person can check this with the GSTIN no. Available on the bill, If no such no. Is there, that means that the owner is not registered under GST and not liable to duty.
- ✓ Restaurants registered under GST composition scheme. A person registered under Composition scheme has to mention in his bill that he is registered under composition scheme.

5. VAT on alcohol

There are some items which are still not in the list of GST, one of which is Alcohol. So if you are having alcohol with your food in an restaurant you have to pay GST on food bill and VAT on alcohol bill.

CONCLUSION

We can see a positive impact on GST on restaurants in India as the old duty systems rates are comparatively high that the current duty rates applicable in GST on restaurants. Due to reduction in the duty rates eating out have now become cheaper. Government has implemented 5% rates on both AC as well as Non AC restaurants but five star hotels still fall under the slab rate of 18%. But still as there are many more clause applicable in different category of restaurants and hotels and all have their own GST duty slabs and rates a common man has to keep in mind my things which might end up in paying more if the restaurant owner does not share the correct information and misguide the consumer to earn more on name of duty. And to avoid such mislead information consumer have to be updated for the same by keeping the above points in mind.

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INDIA VOLATILITY INDEX (INDIA VIX) – A PREDICTOR OF SENTIMENT IN THE STOCK MARKETS

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“Look at market fluctuations as your friend rather than your enemy.” Warren Buffet.

ABSTRACT

Investors of stocks like to gauge the fear and stress in the market before taking a decision about investments. This is now possible with the help of the Volatility Index which is a sentiment indicator and helps the investor to take better decisions. Reversal in markets happens when there is too much optimism or fear. This paper describes the India VIX as a measure of Volatility. It also explains how the Index is calculated and how it can be used for trading. Lastly, correlation between India VIX with NIFTY is calculated for 23 months (April 2017 to February 2019) which exhibited there exists a negative correlation between the two.

INTRODUCTION

A definition for volatility describes it as "the rate and magnitude of changes in price." In simple words, it can mean the speed at which stock prices move in the market. When markets are calm and moving within a range, or has a mild upward bias, volatility is said to be low. On the other hand, volatility is high if the market is not trading within a range or prices are moving to new highs or new lows.

In the securities markets, volatility is often associated with big swings in either direction. For example, when the stock market rises and falls more than one percent over a sustained period of time, it is called a "volatile" market. In the stock market, volatility can either be measured by using the standard deviation or variance between returns from that same security or market index, Beta coefficient and Options Pricing.

The Chicago Board Options Exchange CBOE created the Volatility Index which is a real time market index to capture volatility. This Index represents the market expectation of 30-day forward looking volatility. It is derived from an index viz., S&P 500 index options. Referred to by different names such as “Fear Gauge’ or Fear Index,’ it is a real time sentiment indicator that helps to determine the mood – market risk, fear, stress, optimism or fear in the market.

In India, Volatility Index was introduced on Feb 26th 2014 with the same objectives as the CBOE VIX. Investors of stocks like to gauge the fear and stress in the market before taking a decision about investments. This is now possible with the help of the Volatility Index which is a sentiment indicator that helps investor to take better decisions. Reversal in markets happens when there is too much optimism or fear. Simply put, when the market is calm or there is an upward bias, option buying takes place, call options are more than puts reflecting lack of fear, and when there is a downward bias, puts outnumber the calls reflecting anxiety and fear.

HOW IS THE INDIA VIX CALCULATED?

The computation of India VIX is similar to the methodology adopted by CBOE, with some modifications to make it adaptable to the NIFTY options order book. India VIX is computed using the best bid and ask quotes of the out-of-the-money near and mid-month NIFTY option contracts, which are traded on the Futures & Options segment of NSE. Volatility is one of the several aspects that are used in the computation of value of options and in order to compute such volatility, prices of call and put options are used. The variance of near and mid-month expiry are calculated individually and those variances are interpolated to arrive at single variance with maturity of 30 days to expiration. The arrived square root for calculated variance is then multiplied by 100 to get the value of India VIX. The smallest change in India VIX is 0.0025, which is called tick size and the index is measured in percentage and calculated upto 4 decimals.

There are several factors which are used to calculate the index. Some important ones are these –

1) Time to Expiry: Time to expiry of the options contracts of Nifty that are selected to calculate the index. The calculation of time to expiry of the option contracts is based on minutes in a year instead of days in order to arrive at a level of accuracy anticipated by professional traders. The equation for time to expiry can be portrayed as below:

$$T = \{M_{CD} + M_{SD} + M_{OD}\} / \text{Minutes in year}$$

Where:

T = time to expiry

M_{CD} = minutes remaining until 12 am of current day

M_{SD} = minutes remaining until 3:30 pm of settlement day (expiry)

M_{OD} = minutes in days between current and expiry days (exclusive of both days)

2) Interest Rate: The MIBOR rate of pertinent period (i.e 30 days or 90 days) is considered as risk-free interest rate for the respective monthly expiry of the NIFTY option contracts.

3) The Forward Index Level: A methodology called the forward index level is being used to select the contracts which will be used to calculate the index. Out-of-the-money option contracts are used for the computation of India VIX. Out-of-the-money option contracts are identified using forward index level. The forward index level is taken as the latest available price of NIFTY future contract for the respective expiry month.

4) Bid-Ask Quotes: The strike price of NIFTY option contract that is available just under the forward index level is taken as the ATM strike. NIFTY option call and option put contracts with strike price above and below the ATM strike respectively are identified as out-of-the-money options. The best bid-ask quotes of those option contracts are used for computation of India VIX. Subsequent to the identification of quotes, the variance (volatility squared) is calculated separately for near and mid month expiry.

5) Weightage: The variance is calculated by providing weightages to each of the NIFTY option contracts identified for the computation, as per the method of Chicago Board Option Exchange.

TECHNICAL ANALYSIS AND INDIA VIX

The India VIX is an oscillator and not a trending data series. In the past it has ranged between 11 and 38. In the graph below shows that the VIX has ranged between 13 and 35. After a point the VIX does not trend. It would be good to use as oscillators for the India VIX. One such Oscillator is Bollinger Bands which shows reversal of the India VIX in the 20-day Bollinger Band.



Source: <https://zerodha.com/z-connect/queries/stock-and-fo-queries/trading-india-vix-simplified>

TRADING INDIA VIX

India VIX is an index, and very similar to Nifty. One cannot trade an index unless one has derivative (F&O) contracts on them. With the introduction of India VIX futures, which represents anticipated annualized volatility for the next 30 days, investors can use the India VIX to hedge the volatility risk associated with their portfolios and/or use it for speculation. For instance, India VIX is 15.1234, it should be interpreted as the expected annualized change for the coming 30 days is 15.1234%. The option becomes more valuable at higher levels of volatility and lower valuable at lower of volatility meaning there exists a direct relationship between volatility and value of option which be in either direction.

For hedging long portfolio, one can buy call option and go long in VIX future. In case long portfolio falls badly, the price of VIX goes high, the call options will have increase in value.

The future contract on India VIX

- Lot size: 750 (Reducing to 550 effective 2nd July 2014)
- Symbol: INDIAX
- Tick size: India VIX will be calculated up to 4 decimals with a tick size of Rs 0.0025 (for example, India VIX today is 17.0025)

- Quotation price: India VIX * 100 (multiples of 100). If a trader wants to buy or sell contracts of India VIX futures at 14.1475, then the price that shall be be quoted would be Rs.1414.75.
- Trading hours: 9.15 AM to 3.30 PM
- Expiry Day: Tuesday (Every Week)
- Contract Cycle: 3 weekly contracts
- Final Settlement price: Closing Price of the underlying India VIX index
- Final Settlement procedure: Cash
- Margin: Initial Margin of 9% + Exposure Margin of 5% = 14% of the contract value

INDIA VIX VS NIFTY

The below graph shows the relationship India VIX and NIFTY for 23 months i.e., from 01/04/2017 to 28/02/2019. The red line indicating the movement of India VIX ranged between 10 and 22 during the study period and blue line indicated the movement NIFTY during the same period. It can be inferred from the above graph that NIFTY went up when India VIX went down and holds the same in reverse, which conveys that they diverge from each other by exhibiting a negative relationship between India VIX and NIFTY and higher levels of VIX implies larger movements in NIFTY. Discussing in absolute terms, VIX values less than 20 indicates markets are less stressed and VIX more than 30 considered to have wider swings, larger volatility, uncertainty and increased levels of risk.



Source: <http://www.traderscockpit.com/?pageView=india-volatility-index-chart-vs-nifty-chart>

CORRELATION BETWEEN INDIA VIX AND NIFTY

The below table 1, details month-wise average VIX and NIFTY and correlation between the two for 23 months i.e. from 01/01/2017 to 28/02/2019. During the study period, the minimum and maximum monthly average VIX stood at 11.19 and 19.15 respectively. The minimum and maximum monthly average NIFTY, during the same period stood at 9214.57 and 11498.44 respectively. The below table makes it clear that there exists a negative correlation between VIX and NIFTY, meaning both move in opposite directions i.e. when VIX goes high, NIFTY drops and vice-versa.

Table 1. Correlation Between India VIX and NIFTY

Month	India VIX	NIFTY	Correlation
Apr-17	11.56	9214.57	-0.6759
May-17	11.29	9436.99	-0.1869
Jun-17	11.23	9606.95	-0.8271
Jul-17	11.19	9850.12	0.4024
Aug-17	13.20	9901.18	-0.8458
Sep-17	12.41	9977.92	-0.8795
Oct-17	11.69	10138.68	0.1038

Nov-17	13.35	10324.75	-0.7683
Dec-17	13.75	10322.26	-0.8374
Jan-18	14.73	10771.15	0.8808
Feb-18	16.30	10533.11	-0.3130
Mar-18	15.11	10232.62	-0.7158
Apr-18	13.91	10472.93	-0.9103
May-18	13.58	10664.45	-0.0120
Jun-18	12.82	10742.97	-0.7698
Jul-18	12.73	10991.16	-0.3366
Aug-18	12.72	11498.44	-0.3046
Sep-18	15.03	11297.06	-0.9224
Oct-18	19.15	10383.81	-0.6726
Nov-18	18.83	10621.79	-0.0964
Dec-18	16.53	10778.44	-0.6863
Jan-19	16.74	10809.46	-0.2905
Feb-19	16.18	10878.55	-0.6899

Authors calculations based on NSE data

SUMMARY

VIX is handy indicator and guides accurate measures of option premiums. We have attempted to explain what is India VIX, how it is calculated and used as a guide in making investing decisions and its relationship with NIFTY. The most notable aspect we found is that India VIX and NIFTY shared inverse relationship i.e. both move in opposite directions, when VIX goes high, NIFTY drops and vice-versa and larger VIX leads to wider swings in the markets for the next 30 days. This can be used as hedging instrument in an effective way.

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**BRAND RECOGNITION AND BRAND RECALL THROUGH CELEBRITY ENDORSEMENTS:
ISSUES AND CHALLENGES**

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INTRODUCTION

India is a country where people idolize movie stars and the sports stars, especially the cricketers. Companies have been using these celebrities very effectively for the endorsement of their brands. Celebrities have been known to establish instant brand recognition and also higher brand recall rate compared to the brands which are not endorsed by the celebrities.

This paper studies the effect of celebrity endorsement on the brand recognition and the brand recall rate and the various issues and challenges faced by companies.

DEFINITION OF CELEBRITY

A celebrity is a person who is widely recognized in a society and commands a high degree of public and media attention. Celebrities have a very high degree of public awareness. Today the celebrities are not just from the film industry like Amitabh Bachan, Shah Rukh Khan, Priyanka Chopra but also from the field of sports like Virat Kohli, Sachin Tendulkar.

DEFINITION OF CELEBRITY ENDORSEMENT

According to Friedman & Friedman, a "*celebrity endorser is an individual who is known by the public for his or her achievements in areas other than that of the product class endorsed.*"

LITERATURE REVIEW

Advertising, which is a Propeller for Businesses has seen paradigm shift in the way it's presented. The reliance on Celebrities have gained immense importance than it was a few decades ago. Enough research has been done and its proven that it has a direct impact on the Consumer Purchase. The findings of Osei-Frimpong, Kofi1, Donkor, Georgina2, Owusu-Frimpong, Nana in their Paper (2019) indicate that a celebrity endorser who has attributes such as attractiveness, trustworthiness, and familiarity has a positive influence on consumer's perception of quality, purchase intentions, and brand loyalty. The dominance of Sports & Entertainment Celebrities is evident that Actor Amitabh Bachchan was the Brand Ambassador for 26 Products. Virat Kohli's Brand Value is estimated at \$170m and he is the highest paid Indian Celebrity. The presence of Celebrities in the Advertisements not only denotes surge in sales of the Products or Services but has an impact even on the stock value of the company. This has been cited by Angnihotri, Arpit1 and Bhattacharya, Saurabh (2018) in their findings. The positive impact of 'One Black Coffee Please' advertisement in 1996 placed Ericsson in a different orbit. An altogether different perspective has been given to the Celebrity Endorsements as **PDB**, Power Distance Beliefs in their findings by Page Winterich, Karen, Gangwar, Manish, Grewal, Rajdeep (2018). Celebrity value addition to the business goals is not restricted to just Corporates but also Philanthropic contributions to Non-Profit Organisations and Social transformation objectives. The positive impact with which donations pour in based on the Celebrity's trustworthiness has been delved by Peterson, Nicole1, Tripoli, Elizabeth1, Langenbach, Kalie1, Devasagayam, Raj2 (2018) in their paper titled 'Celebrity Endorsements and Donations: Empirical Investigation of Impact on Philanthropic Giving'. Does Celebrity Endorsements affect customers purchase intention? The study done by Khan, Anas (2017) reveals that there is a significant impact of celebrity endorsement on the purchase intention of customers using FMCG products in Delhi and NCR. While we discuss about the positive impacts, the flip side of Celebrity status was evident in the case of Tiger Woods. The trading on stock market of leading sponsors Nike, Pepsico took the toll close to 2% of market value as per the finds of Knittel, Christopher R, Stango, Victor (2014). It is more so important that the Trust value of the Celebrity plays a crucial role in the game. Marketers focus on advertisements attracting Children have yielded great results. In the present generation, Children are either the decision makers or influencers. Hence, the probability of the success routed through children are very high as per the findings of Saraf, Vikas (2013) in the Research Paper titled 'Impact of Celebrity Endorsement on Children through TV Advertisements'. Celebrity Endorsements add value to the Brand but does that really give an Economic Value Quotient. Research shows that there is a positive pay-off to a firm's decision to sign an endorser, and that **endorsements** are associated with increasing sales in an absolute sense and relative to competing brands. Furthermore, sales and stock returns jump noticeably with each major achievement by the athlete. (Elberse, Anita, Verleun, Jeroen 2012). The customers preference for Female Celebrities is more than the Male Celebrities. The preference for **celebrities** was more for sensory products than cerebral products. Customers want **celebrities** to entertain them

as well as give information pertaining to the products in the advertisements. The factors that customers perceived to be important in selecting the **celebrities** for retail brands were proficiency, reliability, pleasantness, elegance, distinctiveness, approachability and non-controversial. The findings of Jain, Varsha¹, Sudha, Mari², Daswani, Aarzoo in the paper titled 'Customer Perception About Celebrity Endorsement in Television Advertising for Retail Brands' indicates so.

OBJECTIVES OF THE STUDY

1. To study about the effectiveness of the advertisements featuring celebrities on increasing brand recognition and brand recall.

RESEARCH METHODOLOGY

This research study is both exploratory and descriptive in nature. The primary data was collected from the customers of different age groups. The instrument of the research was survey questionnaire which comprised of close-ended questions. Observation technique is also used to add to the primary data collected through the questionnaire method. To avoid biasness in drawing conclusions on the research the survey questionnaire was conducted online on the platform *surveymonkey.com*. The online structured questionnaire was administered to 250 customers who showed the interest and agreed to participate in the survey during the course of the study.

DATA ANALYSIS

Table-1: Top ranked associations preferred in celebrities

Weightage -->	5	4	3	2	1	Weighted Average Score	Rank
IDOL FIGURE	60	40	98	22	30	828	3
YOUTH ICON	80	56	66	19	29	889	1
MASS APPEAL	54	45	85	24	42	795	4
DASHING LOOKS	38	42	110	19	41	767	5
YOUTHFUL ENERGY	82	60	46	29	33	879	2

Source: Secondary Data

Creating the right kind of brand associations helps in connecting with the target customers effectively. Celebrities are being used by most companies in creating some of the brand associations. Majority of the respondents have ranked celebrities representing youth icon as first followed by youthful energy, idol figure, mass appeal and dashing looks. It can be concluded that celebrity endorsements are more effective among the younger generations

Table-2: Brand Recall for products endorsed by the celebrities

CELEBRITY BRAND RECALL					
VERY POOR	POOR	GOOD	VERY GOOD	EXCELLENT	Total
28	20	66	72	64	250

Source: Secondary Data

Brand recall percentage analysis is taken as follows

- ≥ 3 means High
- < 3 means Low

Based on the survey it was found that 202 customers have rated \geq Good on the celebrity brand recall and 48 customers have rated less than Good on the celebrity brand recall.

The goal of advertising is to persuade the potential customer to form a positive attitude and high brand recall towards the brand. A brand with top of the mind recall will have a high probability of falling in the consideration set. Consideration set is that set of brands which the consumers evaluate for the purchase decision. As per the study it was found that celebrity endorsements were able to create such high brand recall among the target customers.

Table-3: Respondents opinion about the Brand Fit between the celebrity and the brand

BRAND-FIT				
PERFECT FIT	TO SOME EXTENT	MISFIT	CAN'T SAY	Total
66	99	30	55	250
26%	40%	12%	22%	100%

Source: Secondary Data

- Around 66% of the customers are positive about the brand fit
- Celebrity endorsements are most effective when the company is selecting the celebrity matching with the personality of the brand. Celebrity brand fit influences the brand recall which impacts the purchase intention. One of the most important aspect which an organisation has to look at while selecting a celebrity to endorse their brand is how well the personality of the celebrity matches the brand personality. Effective celebrity endorsement will happen when there is a perfect brand fit. Brand fit helps in establishing the brand salience with the target audience. It also helps in creating a clear brand identity. Customers select brands which matches with their lifestyle. Also a perfect brand fit leads to a higher rate of brand recall. Organisations should also consider the reputation of the celebrity and the number of endorsements done by the celebrity. A celebrity with multiple endorsements may become a liability for the organisation as he or she may dilute the brand image as the target audience may just consider it to be just another endorsement and may not even remember the brand.

Table-4: Respondents opinion towards watching of TVCs featuring celebrities

WATCH THE TVC FEATURING CELEBRITY ENDORSER	DON'T PREFER TO WATCH	WATCH THE TVC FEATURING CELEBRITY ENDORSER IF IT IS A NEW ONE	Total
64	31	155	250
25.60%	12.40%	62.00%	100.00%

Source: Secondary Data

- 62% of the customers watch the commercials featuring celebrity if it's a new one.

Table-5: TVCs featuring celebrity's ability to cut through the clutter

YES	NO	Total
151	99	250
60.40%	39.60%	100.00%

Source: Secondary Data

- Majority of the respondents agreed to the statement that the commercials featuring celebrity are able to cut through the clutter of advertisements compared to those where celebrities are not there. They are also of the opinion that it is not just the presence of a celebrity, but how creatively the commercial has been executed influences the brand recognition and brand recall rates. There are many commercials like the Mentos advertisement have a higher brand recognition and recall because of the creative execution of the advertisement. Organisations should consider this aspect while deciding to go for celebrity endorsement of their brand.

Table-6: Respondents opinion towards Brand recall of TVCs not featuring a celebrity

TVC BRAND RECALL					
VERY POOR	POOR	GOOD	VERY GOOD	EXCELLENT	Total
29	27	116	49	29	250
11.60%	10.80%	46.40%	19.60%	11.60%	100.00%

Source: Secondary Data

Around 77% of the respondents were of the opinion that though a celebrity was not endorsing a product, those advertisements which were executed very creatively having a catchy jingle were remembered by them. What organizations need to understand that its not just the presence of the celebrity which increases the brand recognition and recall rate but also need to assess the effectiveness by doing market research about the celebrity. They should address the following questions:

- Is the celebrity having multiple endorsements?
- Does the personality of the celebrity match with the personality of the brand?
- Is the personality involved in any negative publicity? If so it would be better not to select the celebrity as it may lead to creating a negative image for the brand.

CONCLUSION

The objective of the study was to understand whether celebrities are effective in establishing a higher brand recognition and recall rate. Based upon the study it was found that celebrities are effective in creating high brand recognition and recall provided the company takes care in selecting the right celebrity. Many organization's overlook this point. They just try to hire a celebrity based upon the popularity in the market. Another important aspect which organizations should be careful about is the vampire affect. Vampire affect is wherein the celebrity overshadows the brand so much that the target audience remember the celebrity but not the brand. Ultimately the creative execution of the advertisement is very important for the success of the advertisement.

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STOCK MARKET VOLATILITY AND EFFECTIVENESS OF STRADDLES

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ABSTRACT

Stock market volatility has been a major concern for policy makers, investors and academia throughout the world. New participants and the new market environment have impacted the market structure which in return resulted in high volatility. The issue of changes in volatility of stock markets has received considerable attention in recent years. The reason for this enormous interest is that volatility is used as a measure of risk. The market participants also need this measure for several reasons. One of the types of participant in derivatives market is trader/speculator. They try to predict the future movements in prices of underlying assets and based on the view, take positions in derivative contracts. Derivatives are preferred by them over underlying asset for trading purpose, as they offer leverage, are less expensive (cost of transaction is generally lower than that of the underlying) and are faster to execute in size (high volumes market). Based on their risk/return preferences and their view about the markets the traders think of innovative combinations of various options and one of the commonly used strategies are straddles and strangles. These strategies involve two options of the same strike prices and same maturity. For the trader who has taken a long position in these strategy huge swings in either direction (volatility) is needed.

This study will be a modest attempt in the area of Derivatives market and the focus will be to analyze the effectiveness of the option strategies in the Indian stock market.

Keywords: Straddle, Strangle, Call option, Put option, Expiry date, Strike.

1. INTRODUCTION

Stock market volatility has been a major concern for policy makers, investors and academia throughout the world. New participants and the new market environment have impacted the market structure which in return resulted in high volatility. The issue of changes in volatility of stock markets has received considerable attention in recent years. The reason for this enormous interest is that volatility is used as a measure of risk. The market participants also need this measure for several reasons. There is also a general belief among participants that the stock markets worldwide have become very fragile in recent past, and consecutive events in several national markets which have had a global impact, have buttressed these beliefs. Countries have sought to take measures to reduce the incidence and impact of abnormal market movements. **Suresh G Lalwani¹(1999)** has emphasized the need for risk management with particular emphasis on the price risk. He has referred to securities market as a "Vicious animal" and there is more than a fair chance that far from improving, the situation could deteriorate. So under this volatile and deteriorating situation how can the traders or speculators can use this volatility to their advantage. Traders/ Speculators are one of the participants in the cash as well as derivative markets. They try to predict the future movements in prices of underlying assets and based on the view, take positions in derivative contracts. Derivatives are preferred by them over underlying asset for trading purpose, as they offer leverage, are less expensive (cost of transaction is generally lower than that of the underlying) and are faster to execute in size (high volumes market). Based on their risk/return preferences and their view about the markets the traders think of innovative combinations of various options and one of the commonly used strategies are straddles and strangles. These strategies involve two options of the same strike prices and same maturity. For the trader who has taken a long position in these strategy huge swings in either direction (volatility) is needed.

2. DEFINITIONS OF SOME IMPORTANT TERMS

Derivative is a contract or a product whose value is derived from value of some other asset known as underlying. Derivatives are based on wide range of underlying assets².

Forward/Futures contract are one of derivative products is a commitment to buy/sell the underlying and has linear payoff which indicates unlimited losses and profits.

Some market participants desired to ride upside and restrict the losses. Accordingly, options emerged as a financial instrument, which restricted the losses with a provision of unlimited profits on buy or sell of underlying asset³.

An **Option** is a contract that gives the right, but not an obligation, to buy or sell the underlying asset on or before a stated date/day, at a stated price, for a price⁴.

The party taking a long position i.e. buying the option is called buyer/holder of the option and the party taking a short position i.e. selling the option is called the seller/writer of the option.

The option buyer has the right but not the obligation with regards to buying and selling the underlying asset, while the option writer has the obligation in the contract. Therefore, option buyer/holder will exercise his option only when the situation is favorable to him, but, when he decides to exercise, option writer would be legally bound to honor the contract.

Options may be categorized into two main types

- Call Options
- Put Options

Option, which gives buyer a right to buy the underlying asset, is called Call option and the option which gives a right to sell the underlying asset, is called Put option.

The risk return profile for plain (vanilla) call/put option reveals that these are limiting losses and unlimited profit positions for the option holder and vice versa for option seller/writer. These products (call and put options) can be used by the speculators/ traders to their advantage and are called as option strategies. The only limiting factor for these strategies is the thought of the trader/strategy designer. As long as the trader can think of innovative combinations of various options, newer strategies will keep coming to the market. Exotic products (or exotics) are nothing but a combination of different derivative products.

Straddle is one of the exotics and this strategy involves two options of the same strike prices and same maturity. A long straddle position is created by buying a call and a put option of same strike price and same expiry whereas a short straddle is created by shorting a call and a put option of the same strike and same expiry⁵.

Strangle is a similar strategy like straddle in outlook but different in implementation, aggression and cost.

As in case of straddle, the outlook here (for the long strangle position) is that the market will move substantially in either direction, but while in straddle, both options have same strike price, in case of a strangle, the strikes are different. Also, both the options (call and put) in the case of strangle are out-of-the-money and hence the premium paid is low.

3. LITERATURE REVIEW

Zuili Hu⁶(1995) in his paper titled “**Stock Market Volatility and Corporate investment**” has opined that despite concerns are often voiced on the so called “ excess volatility” of the stock market, little is known about the implications of market volatility of the real economy. The paper has examined whether the stock market volatility affects real fixed investment. To the extent volatility depresses fixed capital formation and hence future income growth, the results suggest the desirability of reducing stock market volatility.

Pratip Kar et.al.⁷ (2000) in their paper titled “**Stock Market Volatility- A Comparative study of selected markets**” have compared the volatility concerns of selected markets. Stock market volatility seems to concern as well the general public-the lay investors, and market participants-as the regulators and policy makers. Stock prices are expected to be peripatetic in nature and hence every market for assets like common stock inherits some degree of volatility. Higher order volatility however draws attention, is disturbing and causes inquiry. In their paper they have studied the price return volatility in its technical and statistical sense and identify and compared trends and patterns of volatility, asymmetries in volatility, in a sample of thirteen developed and emerging markets over a fifteen year period. They have tried to relate these patterns to changes taken place in Indian markets.

Klaus Adams et.al.⁸ (2015) in their work opined that consumption-based asset pricing models with time-separable preferences can generate realistic amounts of stock market volatility if one allows for small deviations from rational expectations.

Dr. T. Dulibabu⁹ (2017) in his paper titled “**An analytical study on volatility of volatility**” has examined the volatility in the India VIX. The study has been carried on six calendar years from 2011 to 2016 and has found out that there was no significant difference in the volatility among the six year period and also between the half years with in each year and among the quarters within each year. He has concluded that there was no scope to make big returns on index based n volatility.

3. NEED FOR THE STUDY

One of the types of participant in derivatives market is trader/speculator. They try to predict the future movements in prices of underlying assets and based on the view, take positions in derivative contracts. Derivatives are preferred by them over underlying asset for trading purpose, as they offer leverage, are less expensive (cost of transaction is generally lower than that of the underlying) and are faster to execute in size (high volumes market). Traders are needed to keep the derivative markets liquid, if traders/speculators are not there in the market then the other players can't use the various products of risk management. Speculators are the ones who take the risk which hedgers avoid to take. If the stock markets are volatile speculators use exotics and try to cash on the volatility. Straddles and Strangles need huge swings(volatility) in either direction for the strategy to yield profits for the buyer whereas volatility is not needed for the seller of the strategy. This paper will attempt to find out whether the volatility in Indian stock market conducive for these strategies.

4. OBJECTIVES OF THE STUDY

1. To test the effectiveness of the straddles in Indian stock markets.
2. To compare the performance of straddles for the calendar years included in the study.

5. HYPOTHESIS OF THE STUDY

Based on the above objectives the following hypothesis are framed and tested .

H₀₁: The straddles are not effective in Indian stock markets.

H₀₂: There is no significant difference in the performance of straddles across the different calendar years.

All the hypotheses are tested at 5% level of significance.

5. SCOPE OF THE STUDY

The straddles that are formulated and are included in the study are for the period of January 2014 to February 2019. March 2018 contract is not included in the study as the contract-wise prices were not available. Straddles are formed by taking the Index option (i.e. Nifty 50) only. One month contracts are only taken for constructing the straddle. Straddle is settled only on the expiry date and not before that.

6. METHODOLOGY

The historical data of Nifty 50 were obtained from the extensive archives of NSE. The historical data of contract-wise price volume data of Nifty50 Index options for the period of January 2014 to February 2019 was also obtained from the archives of NSE.

The historical data of Nifty 50 that was collected from the extensive archives of NSE is entered into the computer in the form of spreadsheets.

To construct and then to measure the performance of the one month straddles the following steps were taken:

1. To begin with all the one month contract from January 2014 to February 2019 were identified by their start date and expiry dates and were tabulated in the spread sheets.
2. The strike of the various straddles was decided based on the spot Nifty 50 one day prior to the start date of the new near month contract. For example for January 2014 contract, the spot Nifty 50 as on 26.12.2013 was considered as the January contract was from 27.12.2013 to 30.1.14. So the strike considered for that contract was 6300 as the spot Nifty 50 was nearer to 6300. Similarly all the strikes of the various contracts were identified and tabulated.
3. A long straddle position was created by buying a call and a put of the same strike and the same expiry date at the opening prices on the start date of the near month contract. For example the call option premium and the put option premium for January 2014 contract and for 6300 strike were 133.0 and 93.35 respectively on 27.12.2013(start date of the near month contract). Similarly the call and put option prices for the different straddles of all the months were recorded.
4. The cost of the strategy (straddle) was obtained by adding call option premium and put option premium. Cost of the strategy considered in the present example is $113+93.35=226.35$.
5. The straddle was allowed to expire and its pay off was calculated by considering the closing spot Nifty 50 as on the expiry date. For example the closing spot Nifty 50 on 30.1.14 was 6073.7 and the strike considered for January 14 straddle was 6300, so the call will expire worthless and the put will give payoff of $(6300-6037.7)$ i.e 226.3.

6. fThe total pay off of call and put is calculated. Either of the call or put payoff will always be zero. In the example considered the call option payoff was zero whereas put option payoff was 226.3 so the total payoff was 226.3.
7. The net proceedings is then calculated by deducting cost of the strategy obtained in step 4 from the total payoff of the strategy obtained in step 6. Continuing with the same example the net proceedings in this case was 226.3-
8. Then the annualized returns were calculated for each of the one month straddle that was formulated.

The annualized returns were calculated as given below:

$$\text{Retuns}(\% \text{p.a}) = (\text{Net proceedings} / \text{cost of the strategy}) * 100 * 12$$

Annualised percentage returns of each of the straddle included in the study were also tabulated.

7. PERFORMANCE OF STRADDLE DURING THE PERIOD (JANUARY 2014 TO FEBRUARY 2019)

Based on the methodology described in the above section the performance of the one month straddles was tabulated in the table given below:

Table-1: Performance of Straddle (Jan 14 to Feb 19)

Start date	Expiry date	Strike	CE Premi um	PE Premi um	Cost of the straddl e	Nifty Closing Price on expiry	Long CE	Long PE	Payoff of the strategy	Net flow	% Profit/(l oss)
27.12.13	30.01.14	6300	133	93.35	226.35	6073.7	0	226.3	226.3	-0.05	-0.26
31.1.14	26.2.14	6100	110	100.1	210.05	6238.8	138.8	0	138.8	-71.25	-407.05
28.2.14	27.3.14	6200	135	55.05	190.05	6641.75	441.8	0	441.75	251.7	1589.27
28.3.14	23.4.14	6700	116.9	110	226.9	6840.8	140.8	0	140.8	-86.1	-455.35
25.4.14	29.5.14	6800	290	207	497	7235.65	435.7	0	435.65	-61.35	-148.13
30.5.14	26.6.14	7200	168.2	89.9	258.05	7493.2	293.2	0	293.2	35.15	163.46
27.6.14	31.7.14	7500	180	125.6	305.5	7721.3	221.3	0	221.3	-84.2	-330.74
1.8.14	28.8.14	7600	175	75	250	7954.35	354.4	0	354.35	104.35	500.88
1.9.14	25.9.14	8000	108.3	100	208.3	7911.85	0	88.15	88.15	-120.15	-692.17
26.9.14	30.10.14	7900	143.4	101.1	244.5	8169.2	269.2	0	269.2	24.7	121.23
31.10.14	27.11.14	8300	74.6	151.2	225.75	8494.2	194.2	0	194.2	-31.55	-167.71
28.11.14	24.12.14	8600	92.1	327.3	419.35	8174.1	0	425.9	425.9	6.55	18.74
26.12.14	29.1.15	8200	177.4	95.95	273.3	8952.35	752.4	0	752.35	479.05	2103.4
30.1.15	26.2.15	8900	246.2	132.3	378.5	8683.85	0	216.2	216.15	-162.35	-514.72
27.2.15	26.3.15	8800	175	208.8	383.8	8342.15	0	457.9	457.85	74.05	231.53
27.3.15	30.4.15	8400	186	108	293.95	8181.5	0	218.5	218.5	-75.45	-308.02
4.5.15	28.5.15	8300	132.1	174.8	306.85	8319	19	0	19	-287.85	-1125.7
29.5.15	25.6.15	8400	120	200	320	8398	0	2	2	-318	-1192.5
26.6.15	30.7.15	8400	162	170	331.95	8421.8	21.8	0	21.8	-310.15	-1121.2
31.7.15	27.8.15	8500	122.1	131.9	254	7948.95	0	551.1	551.05	297.05	1403.39
28.8.15	24.9.15	8000	218	139	357	7868.5	0	131.5	131.5	-225.5	-757.98
28.9.15	29.10.15	7800	237.9	168.8	406.7	8111.75	311.8	0	311.75	-94.95	-280.16
30.10.15	26.11.15	8100	169.8	122	291.75	7883.8	0	216.2	216.2	-75.55	-310.74
27.11.15	31.12.15	7900	160.1	152.9	312.95	7946.35	46.35	0	46.35	-266.6	-1022.3
28.12.15	28.1.16	7900	117.9	120.5	238.4	7424.65	0	475.4	475.35	236.95	1192.7
29.1.16	25.2.16	7500	108.7	169.2	277.9	6970.6	0	529.4	529.4	251.5	1086
26.2.16	31.3.16	7000	148.5	195	343.45	7738.4	738.4	0	738.4	394.95	1379.94
1.4.16	28.4.16	7700	158	111	269	7847.25	147.3	0	147.25	-121.75	-543.12
29.4.16	26.5.16	7800	176.4	99.65	276.05	8069.65	269.7	0	269.65	-6.4	-27.82
27.5.16	30.6.16	8100	127	141.1	268.05	8287.75	187.8	0	187.75	-80.3	-359.48
1.7.16	28.7.16	8300	151.2	115	266.15	8666.3	366.3	0	366.3	100.15	451.55
29.7.16	25.8.16	8600	194.9	97.5	292.35	8592.2	0	7.8	7.8	-284.55	-1168
26.8.16	29.9.16	8600	158.9	100.4	259.25	8591.25	0	8.75	8.75	-250.5	-1159.5
30.9.16	27.10.16	8600	164.9	158.8	323.7	8615.25	15.25	0	15.25	-308.45	-1143.5
28.10.16	24.11.16	8600	136.9	111.7	248.6	7965.5	0	634.5	634.5	385.9	1862.75
25.11.16	29.12.16	8000	171.5	139.8	311.25	8103.6	103.6	0	103.6	-207.65	-800.58

Start date	Expiry date	Strike	CE Premi um	PE Premi um	Cost of the straddl e	Nifty Closing Price on expiry	Long CE	Long PE	Payoff of the strategy	Net flow	% Profit/(l oss)
30.12.16	25.1.17	8100	136	103.5	239.4	8602.75	502.8	0	502.75	263.35	1320
27.1.17	23.2.17	8600	150	127.3	277.25	8939.5	339.5	0	339.5	62.25	269.43
27.2.17	30.3.17	8900	153.2	119.8	272.9	9173.75	273.8	0	273.75	0.85	3.73
31.3.17	27.4.17	9100	161	80	241	9342.15	242.2	0	242.15	1.15	5.73
28.4.17	25.5.17	9300	135.7	84.1	219.75	9509.75	209.8	0	209.75	-10	-54.61
26.5.17	29.6.17	9500	95.9	113	208.9	9504.1	4.1	0	4.1	-204.8	-1176.5
30.6.17	27.7.17	9500	104.7	110	214.7	10020.6	520.5	0	520.55	305.85	1709.46
28.7.17	31.8.17	10000	124.1	132.9	256.9	9917.9	0	82.1	82.1	-174.8	-816.5
1.9.17	28.9.17	9900	140.1	93.5	233.55	9768.95	0	131	131.05	-102.5	-526.65
29.9.17	26.10.17	9800	140	116.2	256.15	10343.8	543.8	0	543.8	287.65	1347.57
27.10.17	30.11.17	10300	183.9	112.1	295.95	10226.6	0	73.45	73.45	-222.5	902.2
1.12.17.	28.12.17	10200	179.3	90	269.3	10477.9	277.9	0	277.9	8.6	38.32
29.12.17	25.1.18	10500	135.1	134.7	269.7	11069.7	569.7	0	569.65	299.95	1334.6
29.1.18	22.2.18	11100	200.1	200	400.05	10382.7	0	717.3	717.3	317.25	951.63
2.4.18	26.4.18	10200	141	167.7	308.7	10617.8	417.8	0	417.8	109.1	424.1
27.4.18	31.5.18	10700	119.6	182	301.6	10736.2	36.15	0	36.15	-265.45	-1056.2
1.6.18	28.6.18	10700	157	140	297	10589.1	0	110.9	110.9	-186.1	-751.92
29.6.18	26.7.18	10700	99.75	194.8	294.55	11167.3	467.3	0	467.3	172.75	703.78
27.7.18	30.8.18	11200	163.6	138.6	302.2	11676.8	476.8	0	476.8	174.6	693.3
31.8.18	27.9.18	11700	145.1	138.4	283.4	10977.6	0	722.5	722.45	439.05	1859
28.9.18	25.10.18	11000	224.4	167.7	392.05	10124.9	0	875.1	875.1	483.05	1478
26.10.18	29.11.18	10100	271.8	263.9	535.7	10858.7	758.7	0	758.7	223	499.5
28.11.18	27.12.18	10900	209.9	189.9	399.7	10779.8	0	120.2	120.2	-279.5	-839
28.12.18	31.1.19	10800	220	163.3	383.3	10831	30.95	0	30.95	-352.35	-1103
1.2.19	28.2.19	10900	190	187.7	377.65	10792.5	0	107.5	107.5	-270.15	-858
Total					18078					191.7	
Average					296.36					3.14262	

Source: Calculated and compiled by the researcher based on Secondary data

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

As can be seen from above table the total cost of the 61 one month straddle is Rs. 18078 and the total return (profit) of all the 61 one month straddle is Rs.191.7. On observing the figures of the table above it seems that straddle is an effective strategy as it has give positive net proceedings.

The method to study the effectiveness of straddles is as follows:

After calculating the annualized return for each of the straddle then it can compared with the annualized return of fixed deposit of banks (risk free rate of return). Huge swings in the market prices are the requirement of the effectiveness of straddles. If Nifty 50 is volatile and straddle is able to give a return which is significantly higher than the return obtained from the fixed deposit of banks then we can suitably conclude that the straddles are effective. To study the first objective i.e. to test the effectiveness of straddle the hypothesis that was framed and tested is as follows.

Hypothesis 1

Null Hypothesis: There is no significant difference in the mean return of the straddle and the mean return of fixed deposit of banks..

Alternate Hypothesis: There is significant difference in the mean return of the straddle and the mean return of fixed deposit of banks.

Table-2: t-Test for Equality of Means of Straddle's return and Bank's Fixed deposit return (Jan2014 to Feb 2019)

	% return of straddle	%return of fixed deposit
Mean	72.56122951	7.5
Variance	884811.598	0
Observations	61	61
Pooled Variance	442405.799	
Hypothesized Mean Difference	0	
df	120	
t Stat	0.540208956	
P(T<=t) one-tail	0.295027056	
t Critical one-tail	1.657650899	
P(T<=t) two-tail	0.590054111	
t Critical two-tail	1.979930405	

Source: Based on the results generated by using MS-Excel, to the secondary data.

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

Calculated value of t is 0.54 for degrees of freedom 120. The significance value is 0.59 which is more than 0.05 (at 5% level of significance), the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the mean return of the straddle and the mean return of the fixed deposit. With 5% level of significance it is concluded that the straddle is not effective.

9. Comparative performance of Straddle for different calendar years (2014 to 2018)

The year wise performance of straddle is discussed in this section and the hypothesis framed in the earlier section is applied to year wise performance as well.

Table-3: Performance of Straddle (Jan 14 to Dec 14)

Start date	Expiry date	Strike	CE Premium	PE Premium	Cost of the straddle	Nifty Closing Price on expiry	Long CE	Long PE	Payoff of the strategy	Net flow	% Profit/(loss)
27.12.13	30.01.14	6300	133	93.35	226.35	6073.7	0	226.3	226.3	-0.05	-0.26
31.1.14	26.2.14	6100	110	100.05	210.05	6238.8	138.8	0	138.8	-71.2	-407.1
28.2.14	27.3.14	6200	135	55.05	190.05	6641.8	441.75	0	441.75	251.7	1589.3
28.3.14	23.4.14	6700	116.9	110	226.9	6840.8	140.8	0	140.8	-86.1	-455.4
25.4.14	29.5.14	6800	290	207	497	7235.7	435.65	0	435.65	-61.4	-148.1
30.5.14	26.6.14	7200	168.2	89.9	258.05	7493.2	293.2	0	293.2	35.15	163.46
27.6.14	31.7.14	7500	180	125.55	305.5	7721.3	221.3	0	221.3	-84.2	-330.7
1.8.14	28.8.14	7600	175	75	250	7954.4	354.35	0	354.35	104.4	500.88
1.9.14	25.9.14	8000	108.3	100	208.3	7911.9	0	88.15	88.15	-120	-692.2
26.9.14	30.10.14	7900	143.4	101.1	244.5	8169.2	269.2	0	269.2	24.7	121.23
31.10.14	27.11.14	8300	74.6	151.15	225.75	8494.2	194.2	0	194.2	-31.5	-167.7
28.11.14	24.12.14	8600	92.1	327.25	419.35	8174.1	0	425.9	425.9	6.55	18.74
										-32.2	

Source: Calculated and compiled by the researcher based on Secondary data

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

To test the effectiveness of straddle in the year 2014 the following hypothesis is tested for the above data.

Hypothesis 1.1

Null Hypothesis: There is no significant difference in the mean return of the straddle and the mean return of fixed deposit of banks..

Alternate Hypothesis: There is significant difference in the mean return of the straddle and the mean return of fixed deposit of banks.

Table-4: t-Test for Equality of Means of Straddle's return and Bank's Fixed deposit return (Jan2014 to Dec2014)

	% return of straddle	%return of fixed deposit
Mean	16.01416667	7.5
Variance	347903.6661	0
Observations	12	12
Pooled Variance	173951.833	
Hypothesized Mean Difference	0	
df	22	
t Stat	0.05000383	
P(T<=t) one-tail	0.480285276	
t Critical one-tail	1.717144374	
P(T<=t) two-tail	0.960570553	
t Critical two-tail	2.073873068	

Source: Based on the results generated by using MS-Excel, to the secondary data.

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

Calculated value of t is 0.05 for degrees of freedom 22. The significance value is 0.96 which is more than 0.05 (at 5% level of significance), the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the mean return of the straddle and the mean return of the fixed deposit. With 5% level of significance it is concluded that the straddle is not effective for the year 2014.

Table-5: Performance of Straddle (Jan 15 to Dec 15)

Start date	Expiry date	Strike	CE Premium	PE Premium	Cost of the straddle	Nifty Closing Price on expiry	Long CE	Long PE	Payoff of the strategy	Net flow	% Profit/(Loss)
26.12.14	29.1.15	8200	177.35	95.95	273.3	8952.35	752.4	0	752.35	479.05	2103.4
30.1.15	26.2.15	8900	246.2	132.3	378.5	8683.85	0	216.2	216.15	-162.35	-514.72
27.2.15	26.3.15	8800	175	208.8	383.8	8342.15	0	457.9	457.85	74.05	231.53
27.3.15	30.4.15	8400	185.95	108	293.95	8181.5	0	218.5	218.5	-75.45	-308.02
4.5.15	28.5.15	8300	132.1	174.75	306.85	8319	19	0	19	-287.85	-1125.7
29.5.15	25.6.15	8400	120	200	320	8398	0	2	2	-318	-1192.5
26.6.15	30.7.15	8400	161.95	170	331.95	8421.8	21.8	0	21.8	-310.15	-1121.19
31.7.15	27.8.15	8500	122.1	131.9	254	7948.95	0	551.1	551.05	297.05	1403.39
28.8.15	24.9.15	8000	218	139	357	7868.5	0	131.5	131.5	-225.5	-757.98
28.9.15	29.10.15	7800	237.9	168.8	406.7	8111.75	311.8	0	311.75	-94.95	-280.16
30.10.15	26.11.15	8100	169.8	121.95	291.75	7883.8	0	216.2	216.2	-75.55	-310.74
27.11.15	31.12.15	7900	160.05	152.9	312.95	7946.35	46.35	0	46.35	-266.6	-1022.27
										-966.25	

Source: Calculated and compiled by the researcher based on Secondary data

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

To test the effectiveness of straddle in the year 2015 the following hypothesis is tested for the above data.

Hypothesis 1.2

Null Hypothesis: There is no significant difference in the mean return of the straddle and the mean return of fixed deposit of banks..

Alternate Hypothesis: There is significant difference in the mean return of the straddle and the mean return of fixed deposit of banks.

Table-6: t-Test for Equality of Means of Straddle's return and Bank's Fixed deposit return (Jan2015 to Dec2015)

	% return of straddle	%return of fixed deposit
Mean	-241.2466667	7.5
Variance	1077250.646	0
Observations	12	12
Pooled Variance	538625.3229	
Hypothesized Mean Difference	0	
df	22	
t Stat	-0.830212965	
P(T<=t) one-tail	0.207668586	
t Critical one-tail	1.717144374	
P(T<=t) two-tail	0.415337173	
t Critical two-tail	2.073873068	

Source: Based on the results generated by using MS-Excel, to the secondary data.

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

Calculated value of t is -.83 for degrees of freedom 22. The significance value is 0.415 which is more than 0.05 (at 5% level of significance), the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the mean return of the straddle and the mean return of the fixed deposit. With 5% level of significance it is concluded that the straddle is not effective for the year 2015.

Table-7: Performance of Straddle (Jan 16 to Dec 16)

Start date	Expiry date	Strike	CE Premium	PE Premium	Cost of the straddle	Nifty Closing Price on expiry	Long CE	Long PE	Payoff of the strategy	Net flow	% Profit/(loss)
28.12.15	28.1.16	7900	117.9	120.5	238.4	7424.65	0	475.35	475.35	236.95	1192.7
29.1.16	25.2.16	7500	108.7	169.2	277.9	6970.6	0	529.4	529.4	251.5	1086
26.2.16	31.3.16	7000	148.45	195	343.45	7738.4	738.4	0	738.4	394.95	1379.94
1.4.16	28.4.16	7700	158	111	269	7847.25	147.25	0	147.25	-121.8	-543.12
29.4.16	26.5.16	7800	176.4	99.65	276.05	8069.65	269.65	0	269.65	-6.4	-27.82
27.5.16	30.6.16	8100	127	141.05	268.05	8287.75	187.75	0	187.75	-80.3	-359.48
1.7.16	28.7.16	8300	151.15	115	266.15	8666.3	366.3	0	366.3	100.15	451.55
29.7.16	25.8.16	8600	194.85	97.5	292.35	8592.2	0	7.8	7.8	-284.6	-1167.98
26.8.16	29.9.16	8600	158.85	100.4	259.25	8591.25	0	8.75	8.75	-250.5	-1159.49
30.9.16	27.10.16	8600	164.9	158.8	323.7	8615.25	15.25	0	15.25	-308.5	-1143.46
28.10.16	24.11.16	8600	136.9	111.7	248.6	7965.5	0	634.5	634.5	385.9	1862.75
25.11.16	29.12.16	8000	171.45	139.8	311.25	8103.6	103.6	0	103.6	-207.7	-800.58
										109.85	

Source: Calculated and compiled by the researcher based on Secondary data

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

To test the effectiveness of straddle in the year 2016 the following hypothesis is tested for the above data.

Hypothesis 1.3

Null Hypothesis: There is no significant difference in the mean return of the straddle and the mean return of fixed deposit of banks..

Alternate Hypothesis: There is significant difference in the mean return of the straddle and the mean return of fixed deposit of banks.

Table-8: t-Test for Equality of Means of Straddle's return and Bank's Fixed deposit return (Jan2016 to Dec2016)

	% return of straddle	%return of fixed deposit
Mean	64.25083333	7.5
Variance	1201123.93	0
Observations	12	12
Pooled Variance	600561.965	
Hypothesized Mean Difference	0	
df	22	
t Stat	0.179377909	
P(T<=t) one-tail	0.429641399	
t Critical one-tail	1.717144374	
P(T<=t) two-tail	0.859282798	
t Critical two-tail	2.073873068	

Source: Based on the results generated by using MS-Excel, to the secondary data.

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

Calculated value of t is 0.179 for degrees of freedom 22. The significance value is 0.859 which is more than 0.05 (at 5% level of significance), the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the mean return of the straddle and the mean return of the fixed deposit. With 5% level of significance it is concluded that the straddle is not effective for the year 2016.

Table-9: Performance of Straddle (Jan 17 to Dec 17)

Start date	Expiry date	Strike	CE Premium	PE Premium	Cost of the straddle	Nifty Closing Price on expiry	Long CE	Long PE	Payoff of the strategy	Net flow	% Profit/(loss)
30.12.16	25.1.17	8100	136	103.5	239.4	8602.75	502.8	0	502.75	263.35	1320
27.1.17	23.2.17	8600	150	127.3	277.25	8939.5	339.5	0	339.5	62.25	269.43
27.2.17	30.3.17	8900	153.2	119.8	272.9	9173.75	273.8	0	273.75	0.85	3.73
31.3.17	27.4.17	9100	161	80	241	9342.15	242.2	0	242.15	1.15	5.73
28.4.17	25.5.17	9300	135.7	84.1	219.75	9509.75	209.8	0	209.75	-10	-54.61
26.5.17	29.6.17	9500	95.9	113	208.9	9504.1	4.1	0	4.1	-204.8	-1176.5
30.6.17	27.7.17	9500	104.7	110	214.7	10020.6	520.5	0	520.55	305.85	1709.46
28.7.17	31.8.17	10000	124.1	132.9	256.9	9917.9	0	82.1	82.1	-174.8	-816.5
1.9.17	28.9.17	9900	140.1	93.5	233.55	9768.95	0	131	131.05	-102.5	-526.65
29.9.17	26.10.17	9800	140	116.2	256.15	10343.8	543.8	0	543.8	287.65	1347.57
27.10.17	30.11.17	10300	183.9	112.1	295.95	10226.6	0	73.45	73.45	-222.5	902.2
1.12.17	28.12.17	10200	179.3	90	269.3	10477.9	277.9	0	277.9	8.6	38.32
										215.1	

Source: Calculated and compiled by the researcher based on Secondary data

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

To test the effectiveness of straddle in the year 2017 the following hypothesis is tested for the above data.

Hypothesis 1.4

Null Hypothesis: There is no significant difference in the mean return of the straddle and the mean return of fixed deposit of banks..

Alternate Hypothesis: There is significant difference in the mean return of the straddle and the mean return of fixed deposit of banks.

Table-10: t-Test for Equality of Means of Straddle's return and Bank's Fixed deposit return (Jan2017 to Dec2017)

	% return of straddle	%return of fixed deposit
Mean	251.8520833	7.5
Variance	812595.4091	0
Observations	12	12
Pooled Variance	406297.7045	
Hypothesized Mean Difference	0	
df	22	
t Stat	0.939008421	
P(T<=t) one-tail	0.17896119	
t Critical one-tail	1.717144374	
P(T<=t) two-tail	0.35792238	
t Critical two-tail	2.073873068	

Source: Based on the results generated by using MS-Excel, to the secondary data.

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

Calculated value of t is 0.939 for degrees of freedom 22. The significance value is 0.357 which is more than 0.05 (at 5% level of significance), the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the mean return of the straddle and the mean return of the fixed deposit. With 5% level of significance it is concluded that the straddle is not effective for the year 2017.

Table-11: Performance of Straddle (Jan 18 to Dec 18)

Start date	Expiry date	Strike	CE Premium	PE Premium	Cost of the straddle	Nifty Closing Price on expiry	Long CE	Long PE	Payoff of the strategy	Net flow	% Profit/(loss)
29.12.17	25.1.18	10500	135.05	134.65	269.7	11069.7	569.7	0	569.65	299.95	1334.59
29.1.18	22.2.18	11100	200.05	200	400.05	10382.7	0	717.3	717.3	317.25	951.63
2.4.18	26.4.18	10200	141	167.7	308.7	10617.8	417.8	0	417.8	109.1	424.1
27.4.18	31.5.18	10700	119.6	182	301.6	10736.2	36.15	0	36.15	-265.45	-1056.2
1.6.18	28.6.18	10700	157	140	297	10589.1	0	110.9	110.9	-186.1	-751.92
29.6.18	26.7.18	10700	99.75	194.8	294.55	11167.3	467.3	0	467.3	172.75	703.78
27.7.18	30.8.18	11200	163.6	138.6	302.2	11676.8	476.8	0	476.8	174.6	693.32
31.8.18	27.9.18	11700	145.05	138.35	283.4	10977.6	0	722.5	722.45	439.05	1859
28.9.18	25.10.18	11000	224.35	167.7	392.05	10124.9	0	875.1	875.1	483.05	1478.5
26.10.18	29.11.18	10100	271.8	263.9	535.7	10858.7	758.7	0	758.7	223	499.53
28.11.18	27.12.18	10900	209.85	189.85	399.7	10779.8	0	120.2	120.2	-279.5	-839.13
										1487.7	

Source: Calculated and compiled by the researcher based on Secondary data

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

To test the effectiveness of straddle in the year 2018 the following hypothesis is tested for the above data.

Hypothesis 1.5

Null Hypothesis: There is no significant difference in the mean return of the straddle and the mean return of fixed deposit of banks..

Alternate Hypothesis: There is significant difference in the mean return of the straddle and the mean return of fixed deposit of banks.

Table-12: t-Test for Equality of Means of Straddle's return and Bank's Fixed deposit return (Jan2018 to Dec2018)

	% return of straddle	%return of fixed deposit
Mean	481.5636364	7.5
Variance	956810.5705	0
Observations	11	11
Pooled Variance	478405.2853	
Hypothesized Mean Difference	0	
df	20	
t Stat	1.607385343	
P(T<=t) one-tail	0.061821518	
t Critical one-tail	1.724718243	
P(T<=t) two-tail	0.123643035	
t Critical two-tail	2.085963447	

Source: Based on the results generated by using MS-Excel, to the secondary data.

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

Calculated value of t is 1.607 for degrees of freedom 20. The significance value is 0.123 which is more than 0.05 (at 5% level of significance), the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the mean return of the straddle and the mean return of the fixed deposit. With 5% level of significance it is concluded that the straddle is not effective for the year 2018.

The second objective set for the present study is to compare the performance of the straddles across the calendar years included in the study. The calendar years included in the study are from 2014 to 2018. The hypothesis that was framed and was been tested to achieve this objective was as follows:

H₀₂: There is no significant difference in the performance of straddles across the different calendar years.

Annova was applied to the returns of the calendar years 2014 to 2018 and the results are given in the below table.

Table-13: Annova for Equality of Means of Straddle's return of different calendar years (2014 to 2018)

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	8584487	10	858449	1.4654	0.18842	2.07725
Columns	3329050	4	832263	1.42069	0.24475	2.60597
Error	23432553	40	585814			
Total	35346091	54				

Source: Based on the results generated by using MS-Excel, to the secondary data.

https://www.nseindia.com/products/content/derivatives/equities/historical_fo.htm

Calculated value of f is 1.42 for degrees of freedom 4. The significance value is 0.24475 which is more than 0.05 (at 5% level of significance), the null hypothesis is accepted. Hence it is concluded that there is no significant difference between the mean return of the straddle across the different calendar years included in the study (i.e. 2014 to 2018)

10. FINDINGS AND CONCLUSION

- The average cost for one straddle with Nifty 50 as the underlying was Rs.296.36. But as the lot size of Nifty is 75 so the average cost of one one-month straddle for the last five years was Rs. 22227(excluding brokerage).
- The average return for one straddle was Rs.235.5.
- The total net proceedings (after covering for cost of strategy and excluding brokerage) of the years 2014 and 2015 were negative, Rs.-2415 and -Rs. 72468.75.

- The total net proceedings of 2016, 2017 and 2018 were positive, Rs.8238.75, Rs.1613.25 and Rs. 1, 11,577.5 respectively.
- With 5% level of significance it is concluded that the straddle is not an effective strategy for the study period(2014 to 2018) .
- With 5% level of significance it is concluded that there is no significant difference in the performance of the straddle across the calendar years included in the study.

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LEADING IN A VUCA WORLD - THE WORLD IS CHANGING

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ABSTRACT

This rapid flattening is creating a new environment that strategic business leaders are increasingly calling a “VUCA” environment. Coined in the late 1990’s, the military-derived acronym stands for the volatility, uncertainty, complexity, and ambiguity—terms that reflect an increasingly unstable and rapidly changing business world. This new VUCA environment will require HR and talent management professionals to change the focus and methods of leadership development. This article presents one component in effectively responding to a VUCA environment the ability to think strategically. focused on decision making in today’s business context.

Keywords: VUCA environment, leadership development, strategy, change

INTRODUCTION

Defining VUCA each of the four components of VUCA present unique challenges, with the impact of all four simultaneously generating a “change tidal wave” that threatens to overwhelm today’s leader. The following examines each element of VUCA and describes ways to lead more effectively in the VUCA environment.

The concept of VUCA originally gained traction in military circles in Afghanistan and Iraq in response to the proliferation of nontraditional warfare. These environments required a new set of tactics and methods for dealing with conditions on the ground, where existing combat strategies and personnel experience no longer matched the new challenges. The VUCA concept also resonates with an increasing number of CEOs who are trying to make sense of the constantly changing challenges brought on by politics, economics, society, technology and the environment.

OBJECTIVES

This Article paper

- Discusses the history of VUCA and how it applies to business strategy and development.
- Explores how VUCA is relevant to leadership development.
- Offers suggestions on what HR and talent managers must do to change their leadership development approach to foster leadership vision, understanding, clarity, and agility.

NEED OF VUCA

We currently live in a VUCA world and only the fittest survive. To survive, businesses today need to be scalable, nimble & sustainable and transform themselves repeatedly to be able to sustain the effects of the external and internal environment. Many leaders struggle to realize the advantages of a good operational excellence plan. The combinations of talented people, watertight processes and new technologies that can implement them offer more opportunities for businesses to improve customer delight and hence increase their bottom line. To implement such a plan, leaders need to understand that it requires a change in mindset and hence the culture that they set for the rest of the organization.

SCOPE

Business is not running as usual. Leaders must deal with growing uncertainty, complexity, and ambiguity in their decision-making environments. CEOs have little idea what to expect in terms of health care policy, financial transactions, national security, and global trade—all of vital importance to themselves, their employees, and their stakeholders.

Leaders must grapple with a disruptive change in technology, competitor dynamics, and consumer expectations. As complexity increases exponentially, people get further behind. The VUCA world outside affects people, which affects performance.

REVIEW OF LITERATURE

The VUCA concept was first introduced by the U.S. military after the end of the Cold War to describe the conditions of a world ever more difficult to predict and rely on, shaped by Volatility, Uncertainty, Complexity and Ambiguity (Shambach 2004). Since its first appearance in the 1990s. Business and management science adopted the VUCA concept after the financial crisis in 2008–2009, when societies, companies, and

organizations all over the world suddenly found themselves faced with similar conditions in their social and economic environments and models (Doheny et al. 2012, Bennett and Lemoine 2014). Current research related to the VUCA concept focuses on its consequences for leadership and strategic development and the challenges to adapt the mindsets of managers and decision-makers to these new conditions. Even though the principles have been addressed individually, the VUCA concept has not yet found its way into environmental science or conservation practice. Nonetheless major ecological crisis, such as the ongoing drought in California (Robeson 2015) and the recent floods worldwide (Gross 2016), as well as the growing intensity and extent of such events in the last decade (Kimberlain et al. 2016), have brought forward the need for many environmental scientists and conservationists to design and plan with uncertainty in mind. Complex systems dynamics are increasingly recognized by a wider scientific community (Young et al. 2006, Game et al. 2014).

THE ORIGINS OF VUCA

The notion of VUCA was introduced by the U.S. Army War College to describe the more volatile, uncertain, complex, and ambiguous, multilateral world which resulted from the end of the Cold War (Kinsinger & Walch, 2012). The acronym itself was not created until the late 1990s, and it was not until the terrorist attacks of September 11, 2001, that notion and acronym really took hold. VUCA was subsequently adopted by strategic business leaders to describe the chaotic, turbulent, and rapidly changing business environment that has become the “new normal.”

By all accounts, the chaotic “new normal” in business is real. The financial crisis of 2008-2009, for example, rendered many business models obsolete, as organizations throughout the world were plunged into turbulent environments similar to those faced by the military. At the same time, rapid changes marched forward as technological developments like social media exploded, the world’s population continued to simultaneously grow and age, and global disasters disrupted lives, economies, and businesses.

A VUCA world: Let’s take a moment to paint a picture of working context in a VUCA world:

VOLATILE

Volatile In a more volatile world, periods of stability can seem like a thing of the past. Instead we have more instability, wilder fluctuations and often very rapid and unexpected change. No wonder many people see change as the only constant, and HR professionals find themselves ‘constantly re-organising the reorgs’ as their organizations endeavor to respond.

UNCERTAIN

Uncertain With so much volatility, not only is the future unlikely to be much like the past, but the present is often very different too. Information is incomplete because it is changing and there is too much going on to know it all. That increase in uncertainty makes it much harder to figure out what’s happening today, let alone trying to understand what organizational form and capabilities might be important in the future.

COMPLEX

Complex Uncertainty is amplified still further by complexity. The technological ease of connecting with people far and wide has created more interdependencies and feedback loops than ever before. Within those intricate and multi-layered networks, actions can have unintended consequences which cannot be predicted. The risk for those designing organizations is change one thing and one might well change everything!

AMBIGUOUS

Ambiguous ‘Unknown unknowns’ abound in complex, uncertain and volatile environments, and so ambiguity increases. Where no precedents exist, it becomes ever harder to reach clarity and agreement about the meaning and significance of events. In come doubt and hesitancy, making it easy for inertia to take hold. Therefore, in a highly ambiguous environment, it can be difficult to reach decisions about organization design strategies. Put those four conditions together, and the VUCA working world creates a perfect storm of challenges. The difficulties that organizations face in a VUCA world become clear when we think about companies such as BP and Tesco, both of which have hit the headlines in recent times for all the wrong reasons. Both face massive uncertainty as they strive to recover from highly publicized reputational damage, facing volatile markets, the risk of off-the-cuff comments coming back to bite, for past events to take on new significance, and the potential for unknown challenges from hungry competitors. Yet, at the same time, they need to keep large workforces engaged in order to repair the damage and develop new organizational capabilities to ready themselves for an unknown future.

VUCA AND LEADERSHIP DEVELOPMENT

It's a Different World Today Leaders in the design and construction industry have long dealt with volatility, uncertainty, complexity and ambiguity ("VUCA") on a daily basis. VUCA is part of the industry's DNA. Today, though, the rapid pace of change is transforming the global business landscape more and more, rendering traditional leadership skills obsolete and challenging executives to equip themselves with new insights and leadership abilities.

In new VUCA environment, as Milton Friedman (American Economist) notes, is taxing even the most able of leaders who may find their skills growing obsolete as quickly as their organizations change in this volatile, unpredictable landscape. Leadership agility and adaptability are now required skills if organizations are to succeed in this VUCA world. A Business Imperative for a VUCA World" note, to succeed, "leaders must make continuous shifts in people, process, technology, and structure. This requires flexibility and quickness in decision making

Organizations today must shift their business models and their leadership skills to become "adaptive firms." Adaptive firms can adjust and learn better, faster, and more economically than their peers, giving them an "adaptive advantage." Adaptive firms, the study notes, include Apple, Google, 3M, Target, and Amazon.

Today's VUCA business environment requires leaders to possess more complex and adaptive thinking abilities. It also notes that the methods used to develop these new skill requirements (like on-the-job training, coaching, and mentoring) have not changed much, and as a result, leaders are not developing fast enough or in the right ways to keep up with the "new normal" for business.

HR and talent management professionals must position their organizations to succeed in today's turbulent business environment by developing agile leaders. Applying the VUCA model as a framework to re-tool leadership development models may enable HR and talent management professionals to identify and foster the leaders their organizations need now and in the future.

SUCCESS FACTORS

There are no easy answers or quick fixes to think more strategically in the face of a VUCA world. Following are some key success factors to develop leadership:

- ❖ „ One should not lose sight of the big picture by trying to solve all challenges at hand.
- ❖ Be ready to flex and respond to rapidly unfolding scenarios while also retaining a clear vision over which judgments should be made.
- ❖ Make sure that employees understand the company's vision. This will equip them to handle unpredictable and/or violent shifts in your business environment.
- ❖ „ Set up incremental milestones and develop consistent messaging and clear direction, particularly when goals and priorities keep shifting.
- ❖ The path itself may not be clear, but having tangible milestones in place and achieving them will help assure that the organization is moving in the right direction. Small successes boost morale and are also great motivators for employees
- ❖ Carve out open space on the calendar to think on a regular basis, and don't let immediate needs usurp this important planning time. Many construction leaders seem to embody the admonition, "Don't just sit there, DO something!" when sometimes the best advice may be, "Don't just do something, sit there and think".
- ❖ Uncertain times bring opportunities for bold moves. Find ways to challenge the appropriateness of company's mental models, both individually and collectively.
- ❖ Develop processes and concepts to test new ideas and challenge existing ones. Don't be paralyzed out of fear of making the wrong move. Always stay open to new opportunities without losing sight of the longer-term goals.
- ❖ Encourage networks rather than hierarchies. Develop interdisciplinary, collaborative teams and avoid "silo-like" problem-solving approaches. Ensure that employees across the company communicate openly with each other. „
- ❖ Develop independent thinkers. Employees who can think for themselves and make the right decisions in the right moments will help your firm effectively tackle new, complex projects. Be deliberate with training and development campaigns. „

- ❖ Focus on how the company can improve in the future, rather than looking to the past. The past is not necessarily an indicator of the future; moreover, it is highly unlikely that things will return to the way they used to be.
- ❖ Place value on innovative, temporary solutions that perform well in today's unpredictable climate, and one should not rely too heavily on solutions that worked in the past.

Some final thoughts A VUCA world presents a lot of dilemmas: how to balance risk and creativity; how to mobilize without losing control; how to provide leadership during bottom-up change; and how to reduce unproductive complexity without oversimplifying the risks. Over the past decade we have been observed some spectacular institutional failures and we clearly still have a lot to learn about designing organizations that are able to navigate the challenges of the VUCA world. How can organizations avoid this 'system blindness', a kind of 'group think' which leads them to willfully ignore or be simply blissfully unaware of internal or external threats? The reasons might be structural, cultural or both. Our sense is that organizations must:

- ✓ Provoke, rather than predict the future – and learn FAST!
- ✓ Question, challenge and look outside the 'palace walls' to see what the enemy is up to.
- ✓ Promote collaboration (internally and externally) and the exchange of ideas and information. Simplify the environment, making it easier to work in.
- ✓ Mobilize the workforce and fully engage their talents and creativity.

CONCLUSION

With external volatility the prevalent characteristic these days, business leaders who stay focused on their mission and values and have the courage to deploy bold strategies building on their strengths will be the winners. Those who abandon core values or lock themselves into fixed positions and fail to adapt will wind up the losers.

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A CAUSAL STUDY OF THE LINKAGES BETWEEN THE STOCK MARKET AND INTEREST RATES

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ABSTRACT

The objective of the present research is to explore the existence of causal connection between interest rates and stock returns of BSE sensex by Using monthly Daily datafrom January 2018 to December2018, we have considered Weighted Lending rates as a substitute for the Interest Rate and BSE sensex for the research. The research reveals that there exits no causal connection between the Interest rates and stock returns in the short term. Thus, the present research proves, stock market has no relation with the growth of interest rate in India and vice versa.

Keywords: Stock Returns, Lending Rates (Public, Private and Foreign banks), Granger Causality Test, Interest Rate, BSE, Sensex

INTRODUCTION

In the era of globalization and stabilization, one of the macroeconomic variables that have come into main focus is the interest rate. The relationship between stock market returns and interest rate has been examined by researchers as it plays important role in bring change in country's economic development. There are various factors which are alleged to affect the share prices and research on this subject is wide and controversial. As we recognize stock markets are a part of development of Nation's economy same with changes in economy comes in change in financial markets and stock movements, effect of interest rates on stock prices has a further scope for research.

REVIEW OF LITERATURE

Fama (1981) explained in her research that expected inflation is adversely correlated with anticipated real activity, which in turn is positively related to returns on the stock market. Therefore, stock market returns should be adversely correlated with expected inflation, which is often substituted by the short-term interest rate. On the other hand, the impact of the long-term interest rate on stock prices stems directly from the present value model through the impact of the long-term interest rate on the discount rate. Rather than using either short-term or long-term interest rates[1].Campbell (1987) analyzed the connection between the yield spread and stock market returns. He proclaims that the same variables that have been used to forecast excess returns in the term structure also forecasts excess stock returns, concluding that a simultaneous analysis of the returns on bills, bonds and stock should be beneficial. His results support the effectiveness of the term structure of interest rates in forecasting excess returns on the US stock market[2].Kaul (1990) studied the connection between expected inflation and the stock market, which, according to the proxy hypothesis of Fama (1981) should be adversely related since expected inflation is adversely correlated with anticipated real activity, which in turn is positively related to returns on the stock market. Instead of using the short-term interest rate as a proxy for expected inflation, Kaul (1990) explicitly models the connection between expected inflation and stock market returns[3].Poshakwale (1996) found the evidence of non-randomness stock price behavior and the market inefficiency (not weak-form efficient) on the Indian market[4].Uddin and Alam (2007) examines the linear connection between share price and interest rate, share price and changes of interest rate, changes of share price and interest rate, and changes of share price and changes of interest rate on Dhaka Stock Exchange (DSE)[5].The empirical results of the divergent researches specify that growth rates of interest rates adversely affect stock returns with a significant lag in short run dynamic model. Few recent studies carried out in Indian context, Bhanumurthy and Agarwal observed that nominal interest rates adjust only to movements in the wholesale market prices but the connection was not robust. They concluded that interest rate determination in India need not focus much on the domestic inflation rate, as there seems to be no strong co-movement between them[6]Bhatt and Virmani showed that short term interest rates in India are getting progressively integrated with those in the US even though the degree of integration is far from perfect[7].Connection of interest rate and stock returns has been widely examined by ardent researchers. In literature, French, et al. documented theoretically, that stock returns responded adversely to both the long term and short term interest rates[8].Stock exchange and interest rate are two decisive factors of economic expansion of a country. The impacts of interest rate on stock exchange endow with imperative implications for monitory policy and government policy towards financial markets. Interest rates are determined by monetary policy of a country according to its economic state of affairs. High interest rate will put off capital outflows, hamper economic growth and, consequently, upset the economy as interest rates is one of the most vital factors affecting directly the development of an economy. The

rational for the connection between interest rate and stock market return are that stock prices and interest rates are said to be adversely correlated[9].

OBJECTIVES OF THE RESEARCH

(1) To examine the connection between Interest rates and equity investment returns.

(2) To research the connection between Interest rates and stock market returns with BSE sensx as proxy for market returns

Hypotheses

H1: There is a causal connection between monthly stock returns of BSE sensx and Interest rates (public sector banks)

H2: There is a causal connection between monthly stock returns of BSE sensx and Interest rates(private sector banks)

H3: There is a causal connection between monthly stock returns of BSE sensx and (foreign banks)

The objective of the current research is to analyse the current linkage between BSE sensx Stock Index Price Returns and other select Interest rates variables namely public sector lending rates, foreign banks lending rates, private sector banks lending rates. As most of the above mentioned variables are available for monthly frequency, monthly data of all the variables has been included for the period January, 2018 to December 2018 which comprises of 12 observations for each variable

DATA SOURCES AND VARIABLE DESCRIPTION

Table-1: Description of variables

Construction of variable	Data source	Values
Monthly average stock price index from BSE sensx Index in India from BSE	From BSE India official website www.bseindia.com	Stock returns ($R_t = \ln(I_t/I_{t-1})$)
Interest rates (lending rates) of public, private and foreign banks from RBI	From RBI official website	Interest rates

i) Dependent Variable

StockReturns: Stock returns has been calculated by using following equation

$$R_t = \ln(I_t/I_{t-1})$$

Where, R_t = Return for month 't', I_t and (I_{t-1}) = daily BSE-Sensex Index for months 't' and (t-1) respectively. BSE SENSEX is taken as a proxy for equity returns, also-called the BSE 30 or simply the SENSEX, is a free-float market-weighted stock market index of 30 companies listed on Bombay Stock Exchange. The 30 component companies which are some of the largest and most actively traded stocks are representative of various industrial sectors of the Indian economy. Published since 1 January 1986, the S&P BSE sensx is regarded as the pulse of the domestic stock markets in India. The base value of the S&P BSE sensx is taken as 100 on 1 April 1979, and its base year as 1978–79. On 25 July 2001 BSE launched DOLLEX-30, a dollar-linked version of S&P BSE sensx. As of 21 April 2011, the market capitalisation of S&P BSE sensx was about 29733 billion (US\$442 billion) (47.68% of market capitalisation of BSE), while its free-float market capitalisation was Rs15690 billion (US\$233 billion). During 2008–12, Sensx 30 Index share of BSE market capitalisation fell from 49% to 25% due to the rise of sectoral indices like BSE PSU, Bankex, BSE-Teck, etc. The sensx is the benchmark index of the Indian Capital Markets with wide recognition among individual investors, institutional investors, foreign investors and fund managers. The BSE sensx is not only systematically designed but also based on globally accepted construction and review methodology. First compiled in 1986, sensx is a basket of 30 constituent stocks

ii) Independent Variables

Interest rate: When reference is made to the Indian interest rate this often refers to the repo rate, also called the key short term lending rate. If banks have less funds they can borrow money from the Reserve Bank of India (RBI) at the repo rate, the interest rate with a one day maturity. If the Central Bank of India wants to put more money into circulation, then the RBI will lower the repo rate. The reverse repo rate is the interest rate that banks receive if they deposit money with the central bank. This reverse repo rate will be less than the repo rate at all the times. Rise or low in the repo and reverse repo rate have an effect on the interest rate on banking products such as loans, mortgages and savings. Lending Rates of Daily call money rates have been used as proxy of interest rate.

METHODOLOGY

The present research tried to expose the connection between interest rate and stock returns, to focus on 'causality' among the variables using the method developed by Granger. Statistical and econometric tools have been used to test and verify the results of the research for their accuracy.

Granger causality tests seek to answer questions such as "Do changes in y_1 cause changes in y_2 ?" If y_1 causes y_2 , lags of y_1 should be significant in the equation for y_2 . It is a test which is sensitive to the number of lags used in the model. The assumption of data being stationary is followed. Gujarati (2007)[33] In economics the dependence of a variable Y (the dependent variable) on another variable(s) X (the explanatory variable) is rarely instantaneous. Very often, Y responds to X with a lapse of time. Such a lapse of time is called a lag. Is it GDP that "causes" the money supply M ($GDP \rightarrow M$) or is it the money supply M that causes GDP ($M \rightarrow GDP$), where the arrow points to the direction of causality. The Granger causality test assumes that the information relevant to the forecast of the respective variables, GDP and M , is contained solely in the time series data on these variables

Table-2: Results of Granger Causality Test

Lags 2				
Null Hypothesis	Observations	F-Statistic	Probability	Type of causality
H1: Interest rates(public sector banks) does not Granger cause stock returns of BSE sensex Index	10	0.98775	0.4350	No causality
stock returns of BSE sensex Index does not Granger cause Interest rates(public sector banks)		0.81188	0.4951	No causality
H2: Interest rates (private sector banks) does not Granger cause stock returns of BSE sensex Index	10	3.07979	0.1344	No causality
stock returns of BSE sensex Index does not Granger cause Interest rates(public sector banks)		0.82643	0.4897	No causality
H3: Interest rates (foreign banks) does not Granger cause stock returns of BSE sensex Index	10	7.16919	0.0340	Causality
stock returns of BSE sensex Index does not Granger cause Interest rates(foreign banks)		3.73801	0.1017	No causality

Note 1 We fail to reject H_0 when the p-value is >0.05

Source 1 From the analysis of secondary data of macro-economic variables

From the Table 2, it can be observed that there exists no relation between BSE Index and Interest except in the case of foreign banks interest rates showing one direction causal connection. With the given values of F-statistic the p – values are all more than 5% therefore we accept the Null Hypothesis that there is no causal relation between the variables.

CONCLUSIONS

The findings reveal that no causality is noticed between Interest rate and share returns for the selected period of the time, Thus, the research proves that the Interest rate has no impact on the stock returns and in turn stock returns has no impact over the interest rate for the selected period of time for one year. But foreign bank lending rates have little impact on stock returns.

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Causal Research of The Linkages Between The Stock Market And Macroeconomic Variables

THE WAY AHEAD TO OPTIMISE THE PROBLEM OF NON-PERFORMING ASSETS – STUDY ON PROFITABILITY OF STATE BANK OF INDIA

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ABSTRACT

The statistics of 2017 on NPAs to Advances reveals that among 5 associate banks of SBI, 3 are in top 5 major banks facing the problem of NPA. The abundant literature on NPAs reveals that increasing of NPAs is worsening the efficiency of the banks by decreasing profitability. Several steps have been taken by RBI and Government of India to curb the menace of increase in NPAs. Among them one of the steps taken was merging of 5 associate banks with SBI. With merger loan defaulters from associate banks aimed to bring under one roof of SBI, which makes recovery easier. At this juncture, the present research is focused on understanding the possibility of SBI in making the situation as good as possible in the days to come. The present research made an attempt to test the impact of NPAs on profitability using ratios. For the purpose of this study secondary data is extracted from annual reports of SBI and from RBI data base for a period of five years from 2013 to 2017. F-test results indicate there is difference between the means and t-test exhibited statistically insignificant relation.

Keywords: Advances, Non-Performing Assets, Profitability, Profitability Ratios

1. INTRODUCTION

In the year 2015 Government of India launched Indradhanush plan for revamping of public sector banks. Since the nationalisation of banks this was the most comprehensive reform in banking sector. The Indradhanush plan envisaged, inter-alia restoration of public sector banks conditions by infusion of Rs/ 70,000 cr capital by the Government over a period of four financial years. Empirical observations in the arena of banking industry suggest that there are definite scale economies in banking when recapitalisation is taken.

The stress in asset quality of Indian banks persisted to remain high during the financial year 2016-17. Due to increase in the proportion of non-performing assets, banks were pressurised to maintain higher provisioning on NPAs and thereby banking system in India witnessed decline in their level of net profits. The slippages in the asset quality brought ripple bringing adverse impact on banks return on assets and return on equity. However, Government of India, Reserve Bank of India and scheduled commercial banks initiated steps to provide all possible solutions for resolution of stressed assets. The Insolvency and Bankruptcy code, 2016 is expected to play a major role in addressing the non-performing assets. On 5th May, 2017, the Central Government empowered RBI to direct banks to initiate insolvency proceedings in respect of a default under the provision of the IBC code, 2016. At the outset the pronouncement of Government and RBI to first tackle the top 50 large stressed accounts, corporate insolvency is expected to emerge as a credible resolution of bad debts. The implementation of bankruptcy code is likely to have a positive impact on the asset quality of banking system. In addition to this, recently Government announced decision to further recapitalise PSBs with Rs. 2,11,000 cr, through recapitalisation bonds of Rs. 1,35,000 cr and budgetary provision of Rs. 18,139 cr and the remaining under Indradhanush plan over two financial years. As on 5th January, 2018 Rs. 59,435 cr were infused into PSBs under Indradhanush plan.

2. RESEARCH GAP

The merger of associate banks, as well as Bharatiya Mahila Bank with State Bank of India is the first ever large scale consolidation within the Indian banking industry. This has catapulted SBI into the league of top 50 global banks with Rs. 25.85 lakh cr deposits and Rs. 18.62 lakh cr of advances. The benefits of merger will have ripple effect on the liability as well as asset portfolio. With merger loan defaulters from associate banks aimed to bring under one roof of SBI, which makes recovery easier. In addition to this SBI is expected have advantages of economies of cost and improve efficiency. The statistics of 2017 on NPAs to Advances reveals that among 5 associate banks of SBI, 3 are in top 5 major banks facing the problem of NPA. At this juncture, the present research is focused on understanding the possibility of SBI in making the situation as good as possible in the days to come.

3. OBJECTIVES OF THE STUDY

- i) To examine the impact of Net NPAs to Advances on profitability of State Bank of India and its associate banks.
- ii) To analyse State Bank of India concern in optimising the problem of non-performing assets.

4. METHODOLOGY OF THE STUDY

4.1 Sources of Data

The study is based on the secondary source of information for a period of 6 years from 2012 to 2017 taken from Department of Banking Supervision; Reserve Bank of India. Annual reports of State Bank of India, State bank of Hyderabad, State Bank of Bikaner & Jaipur, State Bank of Mysore, State Bank of Patiala, State Bank of Travancore and Bharatiya Mahila Bank Ltd.

4.2. Tools Used

The percentages and graphical representation is used. ANOVA and regression analysis is applied to examine the impact of Net NPA to Advances on the profitability of state bank group, using SPSS.

4.3. Sample Size

The sample size of the banks is State Bank of India, its associates and Bharatiya Mahila Bank Ltd. which are merged on 1st April, 2017.

4.4. Variables Used for Analysis of Study

Impact of Net NPAs to Advances is examined on the following profitability ratios

- Ratio of Operating Profits to Total Assets
- Return on Assets
- Return on Equity
- Return on Advances
- Return on Investments and
- Capital Adequacy Ratio

5. HYPOTHESIS OF THE STUDY

H_{01} = There is no significant impact of Net NPAs to Advances on profitability of State Bank of India.

H_{11} = There is significant impact of Net NPAs to Advances on profitability of State Bank of India.

H_{02} = There is no significant impact of Net NPAs to Advances on profitability of State Bank associates.

H_{12} = There is significant impact of Net NPAs to Advances on profitability of State Bank associates.

H_{03} = There is no significant impact of Net NPAs to Advances on profitability of State Bank Group.

H_{13} = There is significant impact of Net NPAs to Advances on profitability of State Bank of Group.

H_{04} = There is no significant impact of Net NPAs to Advances on profitability of State Bank Group and Bharatiya Mahila Bank.

H_{14} = There is significant impact of Net NPAs to Advances on profitability of State Bank of Group and Bharatiya Mahila Bank.

6. DATA ANALYSIS AND FINDINGS OF THE STUDY - DISCUSSIONS

Table-1: Indicators of State Bank Group as at 31st March, 2017 (in %)

State Bank Group	Credit Deposit Ratio	Investment Deposit Ratio	Ratio of Priority Sector Advances to Total Advances	Interest on Deposits	Interest on Borrowings
State Bank of India	76.83	37.46	21.72	5.59	2.51
State Bank of Bikaner & Jaipur	62.33	33.58	44.37	6.16	5.52
State bank of Hyderabad	55.94	30.75	44.67	6.28	8.58
State Bank of Mysore	43.93	30.41	39.38	6.32	7.09
State Bank of Patiala	69.47	32.45	41.74	6.73	8.23
State Bank of Travancore	42.39	35.55	46.89	6.27	11.21
Bharatiya Mahila Bank Ltd.	59.06	72.62	34.78	6.84	—

Source: Department of Banking Supervision, RBI.

The table 1, shows the indicators of State Bank Group as at 31st March, 2017. The Credit deposit ratio of SBI, SB B&J, SBP stood at 76.83, 62.33 and 69.47 percent respectively. It is a good indicator that these banks maintained CD ratio as per RBI norms 60%. Whereas SBH, SBM, SBT and BMB stood at 55.94, 69.47, 42.39 and 59.06 percent is a bad indicator indicating these three banks were highly reliant on public deposits for mobilizing loans. The investment deposit ratio of all the banks stood between 30 to 37 percent, except BMB at 72.62 percent, overall which are fairly higher than the previous periods of the study. It indicates that during this period banks might have increased Statutory Liquidity Ratio holdings. This leads banks to keep investment to deposit ratio high. The ratio of priority sector advances to total advances of SBI stood at very low level i.e. 21.72 percent and BMB at 34.78 percent which are less than the Adjusted Net Bank Credit norms of 40 percent. Whereas, five associate banks maintained as per the norm. Among all the seven banks SBI interest on deposits is more than interest on borrowings, shows SBI is using public money to meet its costs. By merger of associates with SBI, SBI can have economies of cost.

6.1. Regression Analysis of State Bank of India

Table-2: Explained Relationship Between Net NPA to Advances Ratio to Selected Variable Ratios of the Study – State Bank of India

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	.575	.330	.107	.89898
	Return on Assets	.872	.761	.681	.12486
	Return on Equity	.859	.737	.649	2.10992
	Return on Advances	.897	.805	.739	.32016
	Return on Investments	.612	.375	.167	.451007
	Capital Adequacy Ratio	.716	.512	.349	.39285

Source: Researcher computation

Table 2 explains R^2 values of .330, .761, .737, .805, .375, and .512 and denotes that 33, 76, 73, 80, 37 and 51 percent of the observed variability in operating profit to total assets, return on assets, return on equity, return on advances, return on investments and capital adequacy ratio is explained by variability in the independent variable net NPA to advances ratio.

Table-3: Significance of Multiple Regression Equation - State Bank of India

Independent Variable	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	.012	1	.012	1.481	.311
	Return on Assets	.149	1	.149	9.554	.054
	Return on Equity	37.443	1	37.443	8.411	.062
	Return on Advances	1.266	1	1.266	12.349	.039
	Return on Investments	.366	1	.366	1.800	.272
	Capital Adequacy Ratio	.486	1	.486	3.148	.174

Source: Researcher computation

Table 3 dwells into the explanation F-statistic ANOVA explaining significance of multiple regression analysis of State Bank of India ratios. Here the p values .311, .062, .039, .282 and .174 operating profit to total assets, return on equity, return on advances, return on investments and capital adequacy ratio; greater than .05 indicating there is difference between the means and concludes that an insignificant difference does exist. Whereas return on assets with p value .054 there is no difference between the means and concludes that a significant difference doesn't exist.

Table-4: Significance of Impact of Net NPA to Advances Ratio to Selected Variable Ratios of the Study - State Bank of India

Independent Variable	Dependent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Net NPA to Advances	Ratio of Operating Profits to Total Assets	-.065	.053	-.575	-1.217	.311

Ratio	Return on Assets	-.229	.074	-.872	-3.091	.054
	Return on Equity	-3.635	1.253	-.859	-2.900	.062
	Return on Advances	-.668	.190	-.897	-3.514	.039
	Return on Investments	-.359	.268	-.612	-1.342	.272
	Capital Adequacy Ratio	.414	.233	.716	1.774	.174
Source: Researcher computation						

Table 4 explains the application of student 't' test for testing the hypothesis at .05 level of significance. It is the measure of precision with which the regression coefficient is measure. The operating profit to total assets, return on assets, return on equity, return on advances and return on investments means are less than hypothesised means.

6.2. Regression Analysis of State Bank Associates

Table-5: Explained Relationship Between Net NPA to Advances Ratio to Selected Variable Ratios of the Study – State Bank Associates

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	.897	.805	.740	11.99
	Return on Assets	.998	.997	.995	1.588
	Return on Equity	.998	.996	.995	1.7302
	Return on Advances	.654	.427	.237	20.572
	Return on Investments	.722	.521	.361	18.821
	Capital Adequacy Ratio	.367	.134	-.154	25.29
Source: Researcher computation					

Table 5 explains R^2 values of .805, .997, .996, .427, .512, and .134 and denotes that 80, 99, 99, 42, 52 and 13 percent of the observed variability in operating profit to total assets, return on assets, return on equity, return on advances, return on investments and capital adequacy ratio is explained by variability in the independent variable net NPA to advances ratio.

Table-6: Significance of Multiple Regression Equation - State Bank Associates

Independent Variable	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	1785.831	1	1785.831	12.404	.039
	Return on Assets	2210.165	1	2210.165	875.484	.000
	Return on Equity	2208.758	1	2208.758	737.809	.000
	Return on Advances	948.082	1	948.082	2.240	.231
	Return on Investments	1155.000	1	1155.000	3.260	.169
	Capital Adequacy Ratio	298.231	1	298.231	.466	.544
Source: Researcher computation						

Table 6 dwells into the explanation F-statistic ANOVA explaining significance of multiple regression analysis of State Bank Associates ratios. Here the p values .039, .231, .169 and .544 operating profit to total assets, return on advances, return on investments and capital adequacy ratio; greater than .05 indicating there is difference between the means and concludes that an insignificant difference does exist. Whereas return on assets and return on equity with both p values .000 there is no difference between the means and concludes that a significant difference doesn't exist.

Table-7: Significance of Impact of Net NPA to Advances Ratio to Selected Variable Ratios of the Study - State Bank Associates

Independent Variable	Dependent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	-.035	.010	-.897	-3.522	.039
	Return on Assets	-4.200	.142	-.998	-	.000

					29.589	
	Return on Equity	-.228	.008	-.998	- 27.163	.000
	Return on Advances	1	948.082	2.240	.231 ^b	.231
	Return on Investments	- 20.782	11.509	-.722	-1.806	.169
	Capital Adequacy Ratio	-6.938	10.162	-.367	-.683	.544
Source: Researcher computation						

Table 7 explains the application of student 't' test for testing the hypothesis at .05 level of significance. It is the measure of precision with which the regression coefficient is measure. The operating profit to total assets, return on assets, return on equity, return on investments and capital adequacy ratio means are less than hypothesised means.

6.3. Regression Analysis of State Bank Group

Table-8: Explained Relationship Between Net NPA to Advances Ratio to Selected Variable Ratios of the Study – State Bank Group

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	.874	.764	.685	.5411
	Return on Assets	.998	.996	.995	.3951
	Return on Equity	.998	.996	.994	7.862
	Return on Advances	.720	.518	.358	2.0507
	Return on Investments	.862	.743	.657	.70146
	Capital Adequacy Ratio	.165	.027	-.297	1.6074
Source: Researcher computation					

Table 8 explains R^2 values of .764, .996, .996, .518, .743, and .027 and denotes that 76, 99, 99, 51, 74 and 2 percent of the observed variability in operating profit to total assets, return on assets, return on equity, return on advances, return on investments and capital adequacy ratio is explained by variability in the independent variable net NPA to advances ratio.

Table-9: Significance of Multiple Regression Equation – State Bank Group

Independent Variable	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	2.841	1	2.841	9.702	.053
	Return on Assets	131.838	1	131.838	844.194	.000
	Return on Equity	44380.898	1	44380.898	717.852	.000
	Return on Advances	13.570	1	13.570	3.227	.170
	Return on Investments	4.264	1	4.264	8.665	.060
	Capital Adequacy Ratio	.217	1	.217	.084	.791
Source: Researcher computation						

Table 9 dwells into the explanation F-statistic ANOVA explaining significance of multiple regression analysis of State Bank Group. Here the p values .053, .170, .060 and .791 operating profit to total assets, return on advances, return on investments and capital adequacy ratio; greater than .05 indicating there is difference between the means and concludes that an insignificant difference does exist. Whereas return on assets and return on equity with both p values .000 there is no difference between the means and concludes that a significant difference doesn't exist.

Table-10: Significance of Impact of Net NPA to Advances Ratio to Selected Variable Ratios of the Study – State Bank Group

Independent Variable	Dependent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	-.035	.011	-.874	-3.115	.053
	Return on Assets	131.838	1	131.838	844.194	.000
	Return on Equity	-4.372	.163	-.998	-26.793	.000
	Return on Advances	-.076	.043	-.720	-1.796	.170
	Return on Investments	-.043	.015	-.862	-2.944	.060
	Capital Adequacy Ratio	-.010	.033	-.165	-.290	.791

Source: Researcher computation

Table 10 explains the application of student 't' test for testing the hypothesis at .05 level of significance. It is the measure of precision with which the regression coefficient is measure. The operating profit to total assets, return on equity, return on advances, return on investments and capital adequacy ratio means are less than hypothesised means.

6.4. Regression Analysis of State Bank Group and Bharatiya Mahila Bank

Table-11: Explained Relationship Between Net NPA to Advances Ratio to Selected Variable Ratios of the Study - BMB

Independent Variable	Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	.601	.362	.149	25.8395371
	Return on Assets	.993	.985	.981	3.9034148
	Return on Equity	.086	.007	-.323	32.2245119
	Return on Advances	.132	.018	-.310	32.0598671
	Return on Investments	.691	.478	.304	23.3700669
	Capital Adequacy Ratio	.020	.000	-.333	32.3383307

Source: Researcher computation

Table 11 explains R^2 values of .362, .985, .007, .018, .478, and .000 and denotes that 36, 98, 0, 1, 47 and 0 percent of the observed variability in operating profit to total assets, return on assets, return on equity, return on advances, return on investments and capital adequacy ratio is explained by variability in the independent variable net NPA to advances ratio.

Table-12: Significance of Multiple Regression Equation – BMB

Independent Variable	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	1135.468	1	1135.468	1.701	.283
	Return on Assets	3092.803	1	3092.803	202.984	.001
	Return on Equity	23.255	1	23.255	.022	.891
	Return on Advances	55.007	1	55.007	.054	.832
	Return on Investments	1500.033	1	1500.033	2.747	.196
	Capital Adequacy Ratio	1.210	1	1.210	.001	.975

Source: Researcher computation

Table 12 dwells into the explanation F-statistic ANOVA explaining significance of multiple regression analysis of State Bank Group. Here the p values .283, .891, .832, .196 and .975 operating profit to total assets, return on equity, return on advances, return on investments and capital adequacy ratio; greater than .05 indicating there is difference between the means and concludes that an insignificant difference does exist. Whereas return on assets with p value .001 there is no difference between the means and concludes that a significant difference doesn't exist.

Table-13: Significance of Impact of Net NPA to Advances Ratio to Selected Variable Ratios of the Study - BMB

Independent Variable	Dependent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Net NPA to Advances Ratio	Ratio of Operating Profits to Total Assets	-14.295	10.961	-.601	-1.304	.283
	Return on Assets	-4.654	.327	-.993	-14.247	.001
	Return on Equity	-2.961	19.788	-.086	-.150	.891
	Return on Advances	.835	3.611	.132	.231	.832
	Return on Investments	3.189	1.924	.691	1.657	.196
	Capital Adequacy Ratio	.006	.165	.020	.034	.975

Source: Researcher computation

Table 13 explains the application of student 't' test for testing the hypothesis at .05 level of significance. It is the measure of precision with which the regression coefficient is measure. The operating profit to total assets, return on assets and return on equity means are less than hypothesised means.

Note: Bharatiya Mahila Bank being incorporated on 19th November, 2013; the regression analysis of Bharatiya Mahila Bank has been computed on the basis of 4 years data i.e. fro, 2014 to 2017.

The below table 14 gives insight on the key results of the study and its hypothesis testing

Table-14: Key Results - Hypothesis Testing

Bank	Dependent Variable	Correlation		Variation Explained		F-Statistic ANOVA		t - Test		H ₀
		R	Relationship	R ²	%	F	Sig.	Unstandardized Coefficients - B	t	
State Bank of India	Ratio of Operating Profits to Total Assets	0.575	Strong	0.33	33	1.481	0.311	-0.065	-1.217	Accepted
	Return on Assets	0.872	Very Strong	0.761	76	9.554	0.054	-0.229	-3.091	Rejected
	Return on Equity	0.859	Very Strong	0.737	73	8.411	0.062	-3.635	-2.9	Accepted
	Return on Advances	0.897	Very Strong	0.805	80	12.349	0.039	-0.668	-3.514	Rejected
	Return on Investments	0.612	Strong	0.375	37	1.8	0.272	-0.359	-1.342	Accepted
	Capital Adequacy Ratio	0.716	Very Strong	0.512	51	3.148	0.174	0.414	1.774	Accepted
State Bank Associates	Ratio of Operating Profits to Total Assets	0.897	Very Strong	0.805	80	12.404	0.039	-0.035	-3.522	Rejected
	Return on Assets	0.998	Very Strong	0.997	99	875.484	0.000	-4.2	-29.589	Rejected
	Return on Equity	0.998	Very Strong	0.996	99	737.809	0.000	-0.228	-27.163	Rejected
	Return on Advances	0.654	Strong	0.427	42	2.24	0.231	1	.231	Accepted
	Return on Investments	0.722	Very Strong	0.521	52	3.26	0.169	-20.782	-1.806	Accepted
	Capital Adequacy Ratio	0.367	Moderate	0.134	13	0.466	0.544	-6.938	-0.683	Accepted
State Bank Group	Ratio of Operating Profits to Total Assets	0.874	Very Strong	0.764	76	9.702	0.053	-0.035	-3.115	Rejected
	Return on Assets	0.998	Very Strong	0.996	99	844.194	0.00	131.838	844.194	Rejected
	Return on Equity	0.998	Very Strong	0.996	99	717.852	0.00	-4.372	-26.793	Rejected
	Return on Advances	0.72	Very Strong	0.518	51	3.227	0.17	-0.076	-1.796	Accepted
	Return on Investments	0.862	Very Strong	0.743	74	8.665	0.06	-0.043	-2.944	Accepted
	Capital Adequacy Ratio	0.165	Very Weak	0.027	2	0.084	0.791	-0.01	-0.29	Accepted

State Bank Group Plus Bharatiya Mahila Bank	Ratio of Operating Profits to Total Assets	0.601	Strong	0.362	36	1.701	0.283	-.601	-1.304	Accepted
	Return on Assets	0.993	Very Strong	0.985	98	202.984	.001	-.993	-14.247	Rejected
	Return on Equity	0.086	Very Weak	0.007	0	.022	.891	-.086	-.150	Accepted
	Return on Advances	0.132	Very Weak	0.018	1	.054	.832	.132	.231	Accepted
	Return on Investments	0.691	Strong	0.478	47	2.747	.196	.691	1.657	Accepted
	Capital Adequacy Ratio	0.020	Very Weak	0.000	0	.001	.975	.020	.034	Accepted

Source: Researcher Computation; Note: Independent Variable - Net NPA to Advances

6.5. CONCLUSION – THE WAY AHEAD

In India, concept of consolidation and merger of banks are not a new one. The seeds were sown in early 1990's (viz., Bank of India acquired Bank of Karad 1993-1994, State Bank of India acquired Kashinath Seth Bank Ltd 1995-1996, Oriental Bank of Commerce acquired Bari Doab Bank Ltd 1996-1997) and during early 2000's it was ripen under the Prime Ministership of Mr. Vajpayee, some banks were merged. (viz., Union Bank of India Acquires Sikkim Bank Ltd, 1999-2000, Bank of Baroda acquired Benaras State Bank Limited 2002-2003, Punjab National Bank acquired Nedungadi Bank Ltd. 2002-2003, Oriental Bank of Commerce acquired Global Trust Bank 2004-2005, HDFC bank Limited acquired Times Bank 1999-2000, ICICI Bank acquired Bank of Madura 2000-2001), The recommendations of the Narasimham committee on banking and financial sector reforms, stressed upon the necessary of strong and autonomy of public sector banks. The Committee recommended the use of mergers to increase the magnitude and size of operations of public sector banks. On the other hand, it cautioned that large banks should merge only with banks of same and comparable size but not with weaker banks, which should be closed down if unable to rejuvenate themselves. The argument favoured the merger of strong banks will bring multiplier effect on industry. At the same time merging of strong banks with weak banks would bring in negative benefits due to the tainted asset quality. The materialisation and implementation of consolidation and merger of public sector banks gained momentum in the year 2013. The Reserve Bank of India initiated measures to introducing 4-tier banking structure in Indian. The 4-tire structure envisages promulgating the tire-1 consisting 3 or 4 large Indian banks with domestic and international presence abroad, tire-2 with mid-sized banks and tire-3 with regional rural banks, urban cooperative banks and old private sector banks and tire-4 with small privately owned local and cooperative banks. On the path towards progress, NDA Government and Reserve Bank of India decided to consolidate public sector banks.

Merger of State Bank of India with its five associate banks and Bharatiya Mahila Bank expected to lubricate SBI in creating strong and aggressive bank in public sector. It is expected to facilitate the growing credit requirements of the economy. The expanse can benefit SBI in raring the benefits of economies of scale, synergising to gain the benefits of optimising costs and maximise revenues and to have significant cost savings and reduction in cost to income ratio. The increase in magnitude can be flexible enough to resist shocks and promote financial stability. With the merger, SBI has entered into the league of top 50 global banks with a balance sheet size of 33 lakh cr, with 24,017 branches and 59,263 ATMs serving over 42 cr customers. The increased balance sheet size will enable SBI to command better terms in both international and domestic markets. Merger has facilitated geographical expansion and penetration has increased branch network, enhanced customer base and staff strength, it enables SBI to rationalise factor resources and redundancies across the branches.

With regard to profitability, the Associate banks such as State Bank of Travancore, State Bank of Patiala and State Bank of Mysore have already reported 10.22, 15.48 and 16.89 percent of net NPAs to advances respectively owing to the asset quality concerns on their books. This has brought significance impact on the profitability of the State Bank of India. Has SBI is at the forefront and proactive in adopting changes in technology, we can expect SBI can make effective measures in confronting the losses brought on to the face of asset quality and can have positive impact on its productivity and managerial efficiency. The efficiency gains will lead to lowering cost of rendering services and higher quality as the range of products and services offered by larger banks is assumed to be wider than what was/is offering by smaller banks. Experience in some countries indicates cost efficiency could improve if more efficient banks acquire less efficient ones.

6.6. SCOPE FOR FUTURE RESEARCH

- 1) In future, Impact of post merger of SBI Associates and Bharatiya Mahila Bank into State Bank of India can be carried.
- 2) Study on the perceptions of the employees and customers on merger can be done
- 3) Macro level study on the Impact of merger on economy can be done.

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IMPLICATIONS OF NEW E-COMMERCE POLICY, 2018

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ABSTRACT

E-Commerce as part of the, revolution became widely used in the world trade in general and Indian economy in particular. With advancements in technology, there have been changes in the methodology for business transactions. India, being a rapid adaptor of technology is apace with the current scenario of electronic data exchanges and has taken to E-Commerce. E-Commerce one of the highest growing business, with India having great market potential for investments. Indian E-Commerce sector is expected to generate \$100 billion online retail revenue by 2021. The Indian government to empower the Indian online business entities has implemented the New E-Commerce policy in December 2018. In view of this, this article tries to present a snapshot of the evolution of E-Commerce Policy, 2018 and its clauses, focus and aim. A secondary research is conducted to understand the level of adoption, challenges, benefits and implications of this policy on Indian E-Commerce sector. This initiative as emerged as a “game changer” for few entities and retail sector and “disruption” for giant foreign E-Commerce entities. This policy will also lead to major changes in FDI (Foreign Direct Investment) and investment patterns in E-Commerce sector in India.

Keywords: E-Commerce, Information Technology, Electronic Data Exchanges, Empower, FDI (Foreign Direct Investment)

INTRODUCTION

In India, about 40% of the total population is using internet which accounts for about 475 million as of July 2018, about 40% of the population. In the last few decades, the business on online platforms has seen a swift increase due to escalation & development of technology & internet. India's retail market is estimated at \$470 billion in 2011 and is expected to rise to \$675 Bn by 2016 and \$850 billion by 2020—estimated CAGR of 10%. In India, demand for overseas consumer products & brands is much higher than in-country supply and increase. Presently, the Indian E-Commerce market space is conquered by American giants namely Walmart and Amazon which controls more than 75% of the entire online retail market. For the progress of Indian based E-Commerce entities, the government of India has introduced the New E-Commerce Policy to standardize the E-Commerce sector. This policy has a gigantic potential to change the dynamics of Indian E-Commerce space presently. In addition, the policy is expected to impact overall internet business space including digital payments space, online marketing, Foreign Direct Investment (FDI) and logistics etc. Foreign E-Commerce entities are subject to policy in India; under local law. Under new regulations effective from 1 February 2019, foreign companies are to serve exclusively as marketplaces between vendors and their customers, forbidden from selling any products from vendors that they have power over or have equity stakes in, and it is forbidden to enter into exclusively deals between vendors and websites. This regulation is seen as an offset to Amazon and Wal-Mart's influence on the market, which have given smaller traders a disadvantage in the market.

OBJECTIVES

- To present and analyse E-Commerce policy in India
- To evaluate the implications of the policy on various fields.

SCOPE OF THE STUDY

- The study explores the intensity of the E-Commerce sector.
- It includes the study of committees and ministries involved in policy designing.
- It also includes the study of effect and reactions of various E-Commerce businesses and offline traders in India.

RESEARCH DESIGN

This study is purely based on secondary data. The data is collected from various authenticated sources such as websites, newspapers, news applications etc.

NEW E-COMMERCE POLICY

The New E-Commerce policy was proposed by CAIT to develop the Indian traders on E-Commerce platforms. This policy was implemented on 1st February 2019. The policy has brought in many changes in the E-Commerce business. The policy aimed at development of Indian business and reduces the foreign competition for the Indian E-Commerce businesses.

DATE	EVENT
July 2018	POLICY PROPOSED BY CAIT (Confederation of All India Traders)
August 2018	CAIT presented the policy to The Department Of Industrial Policy And Promotion (DIPP) Under The Ministry Of Commerce.
December 26, 2018	DIPP introduced certain changes termed as clarifications to the 2017 Policy Governing Foreign Direct Investment in ecommerce sector and notified The New E-commerce Policy.
February 01, 2019	Implemented The Policy

NEW E-COMMERCE POLICY- Its Journey

The confederation behind the development of E-Commerce Policy was initiated and proposed by CAIT- a confederation of traders across the country.

CAIT (Confederation of All India Traders)

Dominated by observations, few dedicated Traders in 1990 rooted an idea to constitute a Forum to handle problems of Traders and render effective service to them. In the year 1990 CAIT has been emerged to address these issues. CAIT impressed by its modalities of function, the Traders across the Country extended excellent support. The National Headquarter “Vyapar Bhawan” of CAIT is located at New Delhi

Vision

To bring glory of Indian Traders in main stream of economy and nation and to create a business friendly environment in the Country beside upgrading and modernising existing format of retail trade and development of skills of the traders in India.

Policy Aimed & Focused on

- To promote the sale of made in India goods through E-Commerce platforms.
- To eliminate deep discounts offered on online platforms.
- To protect the Indian offline retail traders.
- To bring up Indian retail market to online market & eliminate foreign E-Commerce players.
- Mandatory mentioning of seller details on the website for all the products and financial disincentives if vendors found to be selling counterfeit products.

E-Commerce Policy Pre and Post Scenario

E-Commerce policy is a boon to local E-retailers and small companies. Although, it is setback for the major E-Commerce players (Amazon, Flipkart etc). The prospects of E-Commerce policy will help the small companies to shift to E-Commerce. The below table shows the various policies and regulations of E-Commerce in pre and post scenario of the New E-Commerce policy.

Pre	Post
No distinguishment of business entities.	Distinguishment of entities into inventory based and market place entities
Sale on deep discounts	Elimination of deep discounts
Freedom of fixing prices	No fixation of prices. Each product must have MRP on its label
No restrictions on FDI	FDI only in market place entities-100%
No compulsion in submitting annual reports to RBI	Compulsory submission of certificate and statutory audit report to RBI every September
Can sale any product (Indian and Foreign)	Encouragement of sale of Indian products
Allowed ownership of stock which is sold on its website	No ownership of stock to be sold on its website.

E-COMMERCE ENTITY MODELS UNDER THE NEW E-COMMERCE POLICY

➤ INVENTORY BASED MODEL OF E-COMMERCE

Inventory based model of E-Commerce means an entity E-Commerce owns the goods & services and sell them directly to customers.

➤ MARKETPLACE BASED MODEL OF E-COMMERCE

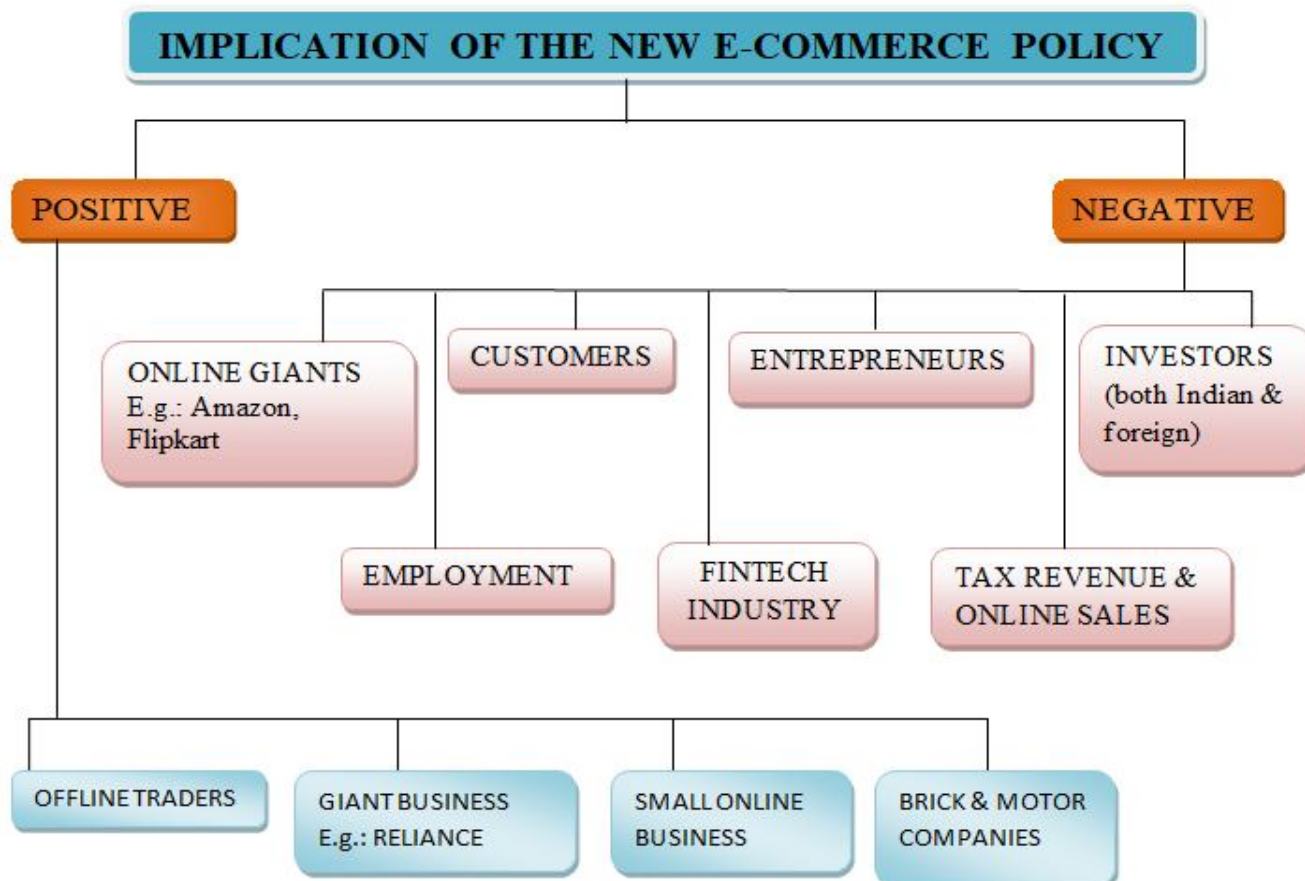
Marketplace based model of E-Commerce means an E-Commerce entity which act as an intermediary between buyer and seller and doesn't own the inventory of its own.

PROVISIONS (OR) CLAUSES OF THE NEW POLICY

- **NO OWNERSHIP OF STOCK:** An entity (“Marketplace Entity”) shall not have the ownership or control over the inventory which it intends to sell.
- **NO FDI TO INVENTORY BASED ENTITY:** Any marketplace entity which has ownership or control over inventory shall convert it into an inventory based model which cannot get FDI.
- **FDI: (FOREIGN DIRECT INVESTMENT)** 100% in marketplace entity and 49% in inventory based entity only if it owns less than 25% stock.
- **MARKETPLACE ENTITY DEEMED TO BE AN INVENTORY BASED ENTITY:** A Marketplace Entity will be deemed to be an inventory based entity, if it owns or purchases more than 25% of its inventory from its vendor or group companies.
- A Marketplace Entity will not mandate any seller to sell any product exclusively on its platform only.
- A compulsion is made that an E-Commerce marketplace entity will be required to furnish a certificate along with a report of a statutory auditor to Reserve Bank of India, confirming compliance of above guidelines, by 30th of September of every year for the preceding financial year.
- **PROHIBITION OF SALE OF PRODUCTS:** A vendor shall not be permitted to sell on the marketplace owned by the Marketplace Entity if such Marketplace Entity or its group companies own any stake in the vendor or exercises control over the inventory of such vendor.
- **NO FREEDOM OF FIXING PRICES:** Marketplace Entity will not influence directly or indirectly sale price of goods or services sold and shall maintain level playing field for all vendors.
- **ELIMINATION OF DEEP DISCOUNTS:** This policy has led to the sale of goods only on y moderate discounts on online websites.
- **PRODUCTS OFFERED:** Only made in India products will be available on online platforms.

IMPLICATIONS OF THE NEW E-COMMERCE POLICY:

The below flow chart depicts the positive and negative implications of the New E-Commerce policy in the economy.



POSITIVE IMPACT OF E-COMMERCE POLICY

- **Local offline traders:** This policy will benefit the local traders as their sales may raise due to elimination of deep discounts on online platforms which led to available of products at same rate on both offline and online platforms.
- **Brick & motor companies:** Companies available on both online and offline platforms may increase their sales and profit margins. E.g.: MAX
- **Small online retailers:** Snapdeal, Shopclues, and Future Group are few small online traders who were suffering losses due to deep discounts offered by online giants. This is now eliminated by which they can come back to their position and earn their market share. Anticipation of increase in sales to 1000crores and regarded this policy as "game-changer" decision.
- **Offline giants:** Various offline giant companies are treating this policy as an opportunity to enter into online market and expand their business.

E.g.: Reliance, Patanjali

NEGATIVE IMPACT OF E-COMMERCE POLICY

- **Online retail giants:** Many online retail businesses will be affected as this policy as lead to changes in sales pattern, investment etc. E.g.: Amazon & Flipkart)
- **Online giant related vendors:** Various vendors selling their products on giant online business platforms will be affected as there are certain restrictions on ownership of stock and FDI.
- **Customers:** This group of people will be more affected as they may not get products of varied brands and deep discounts.
- **Investors:** The policy as made some restrictions on investments in E-Commerce business due to which the investors must change their investment patterns and expect moderate return on investments made in E-Commerce companies.
- **Fintech industry:** Fintech industry is collaboration of financial sector with the technological world i.e. use of technology in financial services & transactions. This industry will be affected due to decrease in online business.
- **Reduction in employment creation:** The big online businesses may layoff their employees as there may be no such huge requirement of human resources at backend process.
- **Reduce in tax revenue:** The tax revenue from the E-Commerce may reduce due to reduction n their sales and revenue & profits.
- **Reduce in B2B:** The policy has implemented some restrictions on vendor relationship with respect to ownership of stock and investment which will lead to reduction in B2B (business2 business)
- **Decrease in online sales(\$800 million now to\$46 billion by 2022):** According to various giant online businesses, the sales may dip rapidly and might take long period of time to gain its original or actual market share
- **End to exclusive partnership:** Exclusive relationships like Amazon-One Plus mobiles, Flipkart-Motorola etc, have come to an end due to prohibition of deep discount sales.

SETBACKS OF THE NEW E-COMMERCE POLICY:

- **AMAZON:** The giant American based online business which occupies the large share (70%) of E-commerce n Indian business.
- **Opposed the New E-Commerce Policy:** This policy was not welcomed by the Amazon Company as it would affect their business, market share and customers at large.
- **Requested for extension of deadline for implementation:** It requested the government to extend the date of implantation so that it may find various alternatives and sell their inventory lying at their warehouses.
- **Removal of 49% of products:** After this policy was implemented Amazon removed around 49% of the products offered on their website. It also removed Amazon groceries sale from their website.
- **Convert into wholesale from retail seller collaborating with Cloudtail & Appario:** It is planning to merge with its vendors i.e. Cloudtail & Appario and convert itself into wholesale seller.

- **Suspended grocery sale**
- **Compete with Reliance Company:** After Reliance Company announced that it will enter into online business; Amazon is planning to compete and overtake the online business in India.
- **Fall in sales (25%-35%):** It is anticipating a decrease in overall sales about 25%-35%
- **Increased delivery charges:** As an alternative to overcome the losses due to this policy, Amazon has started charging high delivery charges for individual products.
- **FLIPKART:** The giant Indian based online business entity which recently merged with American wholesale business entity Walmart.
- **Opposed the new e-commerce policy:** Flipkart has rejected the implementation of this policy and named it as “significant customer disruption”.
- **Chances of end to Walmart- Flipkart deal** –JP MORGAN the financial advisor and investor in Walmart-Flipkart anticipated and stated that there might be chance to end to their merger deal.
- **Walmart may not sell its product on Flipkart site**
- **Changes in Walmart-Flipkart collaboration:** Removed around 25% of products from their website.

➤ CUSTOMERS :

- The group which is most affected
- Decrease in online purchases
- Deep discounts are now a part of past
- No more availability of huge variety of brands & products
- Forced to buy offline at higher rates:
- No cash backs

BENEFICIARIES OF THE E-COMMERCE POLICY

➤ RELIANCE INDUSTRIES

- Ready to launch E-Commerce platform with 1.2 million retailers in Gujarat within 12-18 months
- Planning to overtake foreign rivals Amazon & Walmart.
- Developing a penchant for partnering with startups.
- Acquired few startups:

Logistics delivery service- “Grab A Grub” – To invest Rs.40 crore

Software services-“C-Square Info Solutions”

Language Localisation technology platform-“Reverie Language Technologies”

Software-as-a-service-“Easygov”

Software simulation services company-“SankhyaSutra” Labs

Block chain start-up-“Vakt Holdings”

Artificial intelligence start-up-“Netradyne”

Edtech start-up-“Embibe”

- Creation of employment for youth.

➤ PATANJALI

- To extend its business to online

➤ OFFLINE TRADERS

- The offline local traders may use this policy as an opportunity to expand their business, increase their sales and market share in the market.

NEW E-COMMERCE POLICY- ITS IMPACT ON INDIA & WTO RELATIONSHIP

- India kept-off WTO multi-lateral obligation & E-commerce policy.
- US likely to intervene in Indian e-commerce policy as requested by Amazon & Walmart.
- India to take suggestions from member countries of WTO.

FINDINGS

- **Short term lose but long term gain:** This policy may cause short term losses to few businesses but surely gain long term profits by making various alternatives to retain its market share and goodwill.
- **Introduced at wrong time for its (government) own benefits:** The government of India has introduced this policy at wrong time only keeping n view of their own benefits (i.e. winning of elections by grabbing the attention of local traders and business man)
- **Huge loss to marketing sector:** Due to this policy the online marketing will suffer as it costs high which may not be preferred by few enterprises at this point of time.
- **Norms and rules of New E-commerce policy made it costlier for global firms to operate in India:** Amazon, Flipkart and Walmart were the businesses who opposed this policy for this reason
- This policy is said to be half-baked has there is no proper clarification.
- **Loss in sales:** E-Commerce sector in the country may suffer a \$45.2 billion (INR 3.2 Lakh Cr) loss in sales by 2022 due to the changes in FDI circular in ecommerce policy.
- "Kya apna Kya paraya, iska farq hume aaj samjh aaya, thoda der se aaya par durust aaya"

SUGGESTIONS

- Proper awareness must be brought among the local offline traders.
- Government must provide incentives to the Indian based E-Commerce businesses to expand their business and sales.
- Conferences and seminars must be held to understand and evaluate the pros and cons of the policy.
- Training programs must be conducted to train the offline traders about the ways and means conducting business online.
- Customers must try to inculcate the habit of buying Indian brands and products.

SCOPE FOR FURTHER RESEARCH

- An in depth study can be conducted on the various areas where the E-Commerce policy has its impact
- An evaluative study can be conducted on the perspective of online and offline traders.

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FINANCIAL UNCERTAINTIES –ISSUES, AND CHALLENGES

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ABSTRACT

Volatility, Uncertainty, Complexity, and Ambiguity(VUCA), has gained popularity after the financial crisis in the US. VUCA concept first used by Army college of U.S.A, later the same adopted into the business world. The negative or positive events that are happening outside environment paving the path to an embarrassing situation in the business. In today's global business environment the company has to experience many unpredictable events with no predetermined fixed solution. Political risks, environmental regulations, cultural diversity of the consumers, may it economic nationalism, domestic or international unrests and so on, which is ultimately becoming financial challenges to the business entities. The financial adversity of 2008-2009 taught great lessons to business entities all over the globe. This paper aims to outline the financial challenges that the present economic context is adding to the finance function and to present how it will be dealt with.

INTRODUCTION

The financial department of any organisation whether it is production or service oriented, small local firm to a multinational company will get affected by the rapid changing macroeconomic environment. The entity reaction to the unknown situations makes it either develop or decline in the industry. Strategies designed and implemented, the decision taken by the finance function plays a crucial role in the success of the entities. The ability of the finance department decision making at the right time will confirm the going concern of the business. Adaptability to the environmental changes in the new era of technological domination, automated process, artificial intelligence will show the strength of the organisation. No matter, whatever the challenges are there, the same is going to affect and get affected by the finance function. This uncertain issues can be better dealt with by well knowledge human resources in the finance function.

THE OBJECTIVES OF THE STUDY ARE TO DESCRIBE

Financial uncertainties, issues and challenges.

THE METHODOLOGY OF THE STUDY

To accomplish the purpose of this study, the researcher has used the descriptive, analytical approach which mainly relies on the inductive method, examining the studies and researches. Which have addressed the financial uncertainties -related issues and challenges.

Sources of Data: Primary and secondary Sources which includes a discussion with advisers and studying journals, books, periodicals, conversations, reports used for this study.

The Scope of Study: The scope of the study is limited to financial uncertainties, issues and challenges.

FINANCIAL ISSUES AND CHALLENGES**1.Unpredictability**

All living souls, but it seems business people especially, find embarrassment in unpredictable conditions. Unpredictability in the international economy, unpredictability in the credit markets, unpredictability in how new laws will influence the business, unpredictability about what rivals are doing, and unpredictability about how new technical knowledge will change the ways of doing business—it's an endless list. The crux is that unpredictability leads to a momentary focus. Companies are not concentrating on long-term planning in favour of quick results, with unpredictability often the excuse. Failure to plan for long term future can end up adversely. To solve this, need a balanced approach to momentary, i.e. short term planning with the aim of reacting Long-term challenges.

2. Globalisation Impact

Top CEOs of the world feels that the challenges of globalisation as their top concern. Understanding different cultures are essential to everything from the ability to enter new markets with existing products and services, to designing new products and services for new customers. The problem to be solved is to better understand international markets and cultures through better information gathering and analysis of what it all means.

3. Innovation

Innovation, whether it is disruptive or continuous, is very much needed for the financial ecosystem. Surveys showed that most of the companies not tending towards the culture of innovation. An entity can't survive with

its outdated products. Changing with the demand, fashion, priorities, very much required to the business entities. Unfortunately, most of the companies not concentrating on the innovation edge. Even the top companies of the globe are also ignoring the innovative culture. This problem can be solved by how to become more creative while still maintaining a sense of control over the organisation.

4. Government Policy & Regulation

The government and regulatory authorities play a vital role in the growth of the companies. An unstable regulatory environment is always of concern in specific industries, but the uncertain environmental and financial policies are complicating the decision making for nearly all companies today. Policies related to taxes, exemptions, rebates based on MOUs among the countries affect the corporate players. The entity needs to concentrate and understand the meaning of regulations and government policies in specific industry, its implications on business, and need to develop the necessary skills necessary to deal with it.

5. Technological changes.

In today technological world the automation of business process improved and increased rapidly. Investment in technical tangible and intangible assets is the big issues for the business leaders. The competitor may wait for upgraded technology and invest, which makes other's an outdated one. For competitor also there is an equal risk of waiting for new technology by missing the opportunity cost. Business leaders are losing the money by investing in the technological assets that may include software or other automated business processes which soon after become outdated or non-competitive. To overcome this, the business leaders can adopt Long-term technical strategy and updating the technology by investing lesser resources. Also entering into a proper contractual agreement with vendors for maintenance and modernisation is another course of action for this problem.

6. Diversity

Another socio, cultural challenges to the business world are diversity. Diversity may in the form of racial, ethnic, gender, regional, religion etc. It leads to non-agreement of the people, which in turn leads to slowing or stalling of the decision making. Large companies, among the leaders, this diversity leading to distortion of the growth of the companies as some don't accept other's decision.

To counteract the problem, we need to define and understand the subject matter of diversity with present conditions. Counselling, guiding the people towards achieving the goals of the organisation is one of the countermeasures.

7. Complexity

Complexity is the synonym of business. Thanks to Information Technology which makes certain activities and tasks more manageable. Complexity is a significant concern that business leaders shouldn't try to ignore. Harvard Business Review, In its survey, mentioned that 85 % of business leaders expressed that the Business process and its compounding decision making is more complicated, which in turn leads to wrong or slow decision making. Simplification without compromising the organisation goals, designing adopting business models, business process reengineering, the selective approach of complexity management is the essential concepts to overcome the complexity.

8. Information Overload

Information is wealth. In today's cyber environment access to the data through the web and other sources are very easy. However, merely picking up all the data or information for making a decision won't serve the purpose.

By 2022, 4.8 Zeta bytes will be the global internet traffic as per the surveys. It is one of the significant challenges to the companies to take a decision based on the vast information which may closely or remotely be related to their problem and resolution.

To overcome this, defining and understanding the problem, obtaining the proper and related information, analysing the same with artificial intelligence along with human brains is the best choice for the business world.

9. Supply Chains

The surveys made by Institute of Business Continuity shared that 27% of companies had experienced disruptions due to the financial failure of suppliers. The companies maintain lesser inventory to avoid the excess carrying costs because of the uncertainty of demand. More fluctuations in raw material prices, natural disasters, commodity price variances are significant concerns in supply chain management. Most of the smaller companies are unable to meet their larger customer's demand Because of their inability to mobilise the required resources from outside.

To counteract this challenge, maintaining proper supply chain management strategy, proper working capital management, adequate evaluation of suppliers/customers history are some of the measures.

10. Strategic Thinking & Problem Solving

"Intellectuals solve problems; geniuses prevent them." - Albert Einstein. It is to mention that addressing the problem at the correct time is one of the most significant issues for the companies. If the problem is not solved at the right time, it can lead to a lot of disturbances in the business, mainly financial related some time may lead to bankrupt.

Framing the problem, identifying the root causes, determining the actual cause, identifying the potential solution, communicating the answer effectively, implementing and monitoring the solution are the factors of best problem-solving methodology.

11. Cost calculation and global pricing strategy

Product pricing is another challenge to the finance function; the price should be such that, it should not be more than the competitor's product price, at the same time should cover all the costs incurred by the business entity with an acceptable profit margin. The business has to face cutthroat competition when selling the goods internationally. Reduction in cost without impairing the quality of the product is one of the significant challenges to the finance function. Absorption of indirect costs to the product, maintaining the profit margin by taking into consideration of competitor price and goodwill, quality of the product is the primary concern to the finance department. To overcome this ABC Analysis, Standard costing techniques, Market surveys are very much advisable.

12. Universal payment methods

The growth of the online business has made making international trade more comfortable and more economical to all type of consumers. However, methods of payments that are used locally may not be acceptable globally. Determination of acceptable methods of payments and establishing secure payment processing is one of the critical financial challenges that must be addressed for the international business community.

Accepting well-known universal payment methods as well as accepting acknowledged local payment methods, can be a better solution for large international businesses. Accepting Paytm, Google pay, PayPal payments, are other possibilities. Some of the payment intermediaries servicing for free of charge which is beneficial both for seller and buyer.

13. Currency rates

While price fixation and methods of payments are significant issues, currency rate fluctuation is another most challenging global business challenge to focus on. Exchange rates monitoring is must, therefore, be a central part of the strategy for all international businesses. However, there is a problem of identifying correct profits when the fluctuations in rates are unpredictable.

Way to manage the issue is by paying the money in local currency to producers and vendors and suppliers. Switching to more local manufacturing where possible to better balance your outgoings and sales revenue. Another option for mitigating the risk of variable currency rates can be entering a forward contract and agreeing to a price in advance for future settlement.

14. Political risks

Business organisations and Financial institutes expanded their business beyond their boundaries for better growth in terms of income and profits. Internationally financial and economic threats to the business world are due to sanctions of foreign states, economic nationalism, war, terrorism, disagreements with other countries. No company wants to operate in a politically risky environment. However, once the organisation is established, it is challenging to shift due to operational, legal and financial limitations. Choosing right regional banking, political risks insurance, having the second plan for supply chain, getting local expert advice can mitigate the political risks.

15. Worldwide environmental issues

Recent international regulations and proposals, such as the UN's Sustainable Development Goals, Paris climate agreement have put ecological problems at the forefront of global business development. The concept of inclusive growth is present trending and most important concept to be adopted by the business. If the organisation wants to expand the business outside its country, it's important to know the knowledge of country-specific environmental legislation and issues associated with the specific industry. Some key considerations include how the entity's production or service methods might impact the local environment through waste and pollution.

CONCLUSION

The volatility, uncertainty, complexity, and ambiguity (VUCA) inherent in today's business world is the —new normal, and it is profoundly changing not only how organisations do business, but how business leaders lead. The managers should be keen to take the challenge, and this must be a rough path so that the urge to excel will be created and this will be transferred although. HR and talent management professionals can help their organisations succeed in today's VUCA environment by developing leaders who can counter volatility, uncertainty, complexity, and ambiguity with vision, understanding, clarity, and agility.

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INTERNET BANKING-FACTORS EFFECTING THE USE OF INTERNET BANKING AMONG STUDENTS IN INDIA**Siripuram Swathi and Sandeep Avasarala**

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ABSTRACT

The objective of the study is to find significant factors effecting the use of Internet Banking among students in India. Further, it has attempted to evaluate, how efficiently and effectively the respondents are using Internet Banking services provided by the banks. The idea of Internet banking was started in the late 1990s in India and it was completely a successful campaign from there onwards. The technological revolution has made a grand success and reduced the burden on both the customers and bankers. The study is descriptive in nature and a select sample of 167 students was used for data collection and it comprises of 94 male respondents and 73 female respondents. Data is collected with the help of survey method using a questionnaire. The questionnaire contained 20 questions and was provided to the respondents to obtain the opinion of student users.

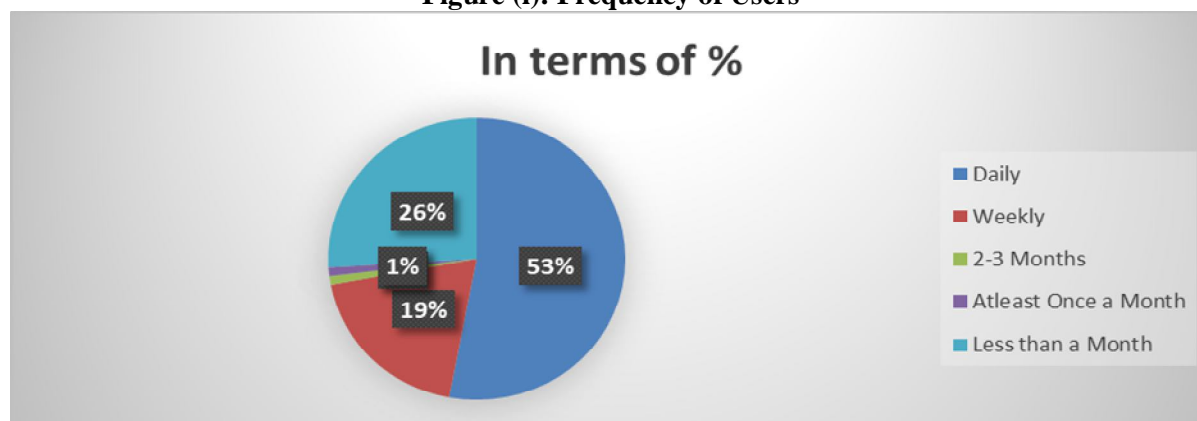
Keywords: Online Banking, Internet Banking.

INTRODUCTION

Technological innovations have initiated a huge impact on human lives, which ultimately lead to the development at a faster pace. In India, Internet Banking is one such disruption in the market which has changed the phase of the Indian Banking sector. It has changed our lives and made our work easier. This has also changed the way we bank. Today, Internet banking, also known as Online Banking or E-banking, is being provided by banks to its customers, which enables them to get banking services on their mobiles and laptops through the internet.

Indeed, E-banking is providing everything with just one click. The customers have easy access to all the services being provided by the modern banks, when compared to the traditional banking. Now, customers are not required to waste their valuable time standing in queues at banks to obtain services of it.

Figure (i) shows that 53% of the users of E-banking services use these services daily. About 19% use weekly, 2% use these services very rarely and 1/4th of the users limit their usage once in less than a month. It can be concluded that most of the users of E-banking services use these services daily.

Figure (i): Frequency of Users

Source: IAMAI & Kantar IMRBI-CUBE 207, All India Users Estimates.

What is Internet Banking?

E-banking is a virtual banking platform provided by a bank to its customers for effective use of banking system (24*7) anywhere and anytime by reducing the transaction time. The services provided by the E-banking ranges from making of traditional activities like payment to others to modern activities like making a request to banks for an issue of ATM Card, Cheque book etc.,

E-banking services offered by the banks are through a secured web portal on the bank's website. Usually banks provide 2 step verification process to access E-banking services, wherein the initial step, the user is required to type his/her Username & Password after which the second step is the user authentication i.e., checking the genuineness of the user through generating a One Time Password (OTP) to the user's mobile number or else e-mail id.

The History of Internet Banking

E-banking was first started in 1980s in the United States of America. It includes the usage at terminal, keyboard and TV (or a monitor) with an intention to approach the banking system using a phone line. Developing countries like India, in the late 1990s were more attracted towards technological advancements. Many pieces of research indicated that E-banking has a significant impact on the business models of financial institutions like banks etc., E-banking has also attracted the attention of regulators and lawmakers in the developing nations.

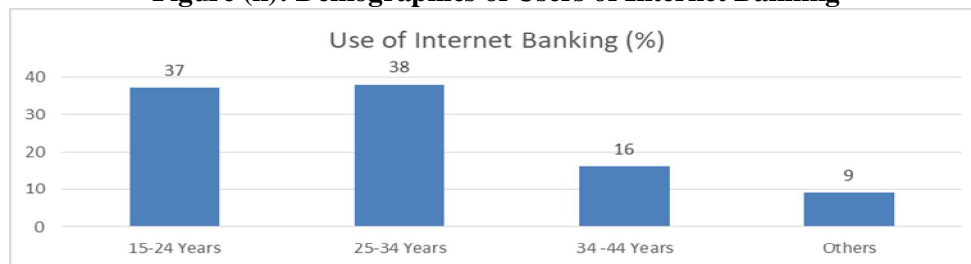
Why do banks go online?

In Traditional banking, any individual holding an account with the bank requires his/her presence every time to make any transaction done, which is routed through his account. With the innovations made in the field of technology, banks have started adopting them and started analyzing the positive impact of the reduction of cost and better satisfaction to its customers. Banks have seen a rapid increase in the number of customers using these services and making things done for themselves parallelly reducing the cost of a transaction to the banks. The reflection of the E-banking is on cost saving, revenue growth and most importantly increased customer satisfaction.

Need for Study

According to a Survey, the majority of E-banking service users are students who belong to the age group of 15-24 years. Therefore, the researchers have attempted to evaluate the significant factors which contribute to use E-banking by students' group.

Figure (ii): Demographics of Users of Internet Banking



OBJECTIVE OF THE STUDY

- The objective of the study is to find the significant factors influencing students to use internet banking services.

DATA AND METHODOLOGY

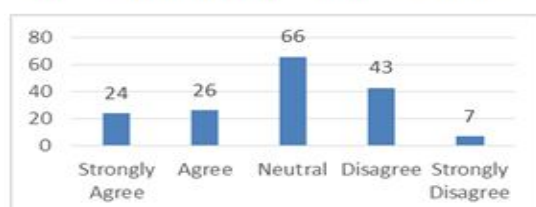
This study is descriptive in nature which helps us to understand the factors effecting the use of E-banking among students. A select sample of 167 students has been collected for data collection and it comprises of 95 male respondents and 72 female respondents. Data is collected with the help of questionnaire survey method. A questionnaire containing 20 questions was provided to the respondents to obtain the opinion from the students. The age of respondents was between 18-24 years. SPSS was used to analyze the data.

ANALYSIS

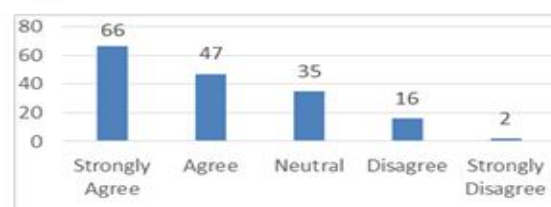
In the late 1990s, the world has seen a rapid phase of development in technology and many countries have started adopting most of these developments. Even India is one among them, ICICI bank is the first bank to provide these services to the customers in India. The questionnaire enquired about the usage of E-banking over traditional banking, factors influencing usage and purpose of usage of different services.

Ease of use: Unlike traditional banking, E-banking is easy to use and the customer can make better use of these services. Questions 1 and 2 enquires whether the students feel traditional banking facilities are better than E-banking services and their usage, where most of the students are using E-banking services. Our findings reveal that both traditional and online service are parallel to each other. The graphs are self-Explanatory.

1. Do you think traditional Banking services are better than Internet Banking?



2. You use online banking services very often.



FACTORS INFLUENCING INTERNET BANKING

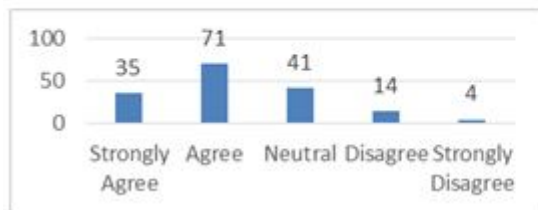
Reliability, Accuracy and Security: Most of the banks use CBS software for maintaining the customer database, which allows banks to maintain data accuracy and provide better customer services. The adoption of technology by the banking sector makes the banker's job easier and also the maintenance of a huge database of a large number of customers. E-banking which is linked with the CBS makes the customer use the bank's services online.

Questions 3-9 enquires effectiveness, security, time-consuming, easy to use, reliable and accuracy of E-banking. Figure1 shows that large portion of the respondents say that E-banking is very effective and secure for transactions. While only a small proportion of the respondents felt that it is not effective and secure. Further majority of the respondents also agree that usage of E-banking saves time and provides convenience.

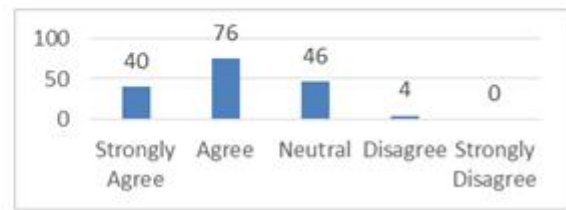
24*7 Assistance: Most of the banks works for 8 hours a day and 6 days a week, which restricts the customer to make better use of services provided by the banks and sometimes it takes time for any person to visit the bank and make use of services. E-banking can be used by the person at any point of time according to the ease of the customer. Figure8 depicts that E-banking provides 24/7 services. Most of the respondents provide a positive opinion about the same.

Assistance for queries: Among the total sample, 105 believe that E-banking provides assistance for any queries raised during the process of transactions. While 9 students do not believe this statement.

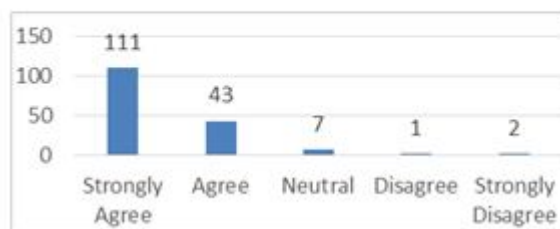
3. Do you think Internet Banking is effective and secure?



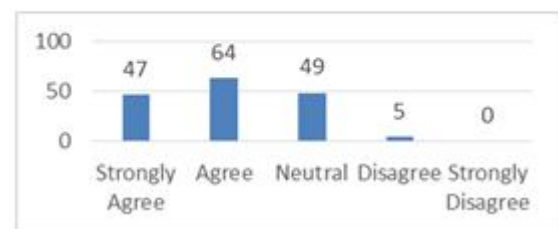
6. Do you think online transactions are reliable?



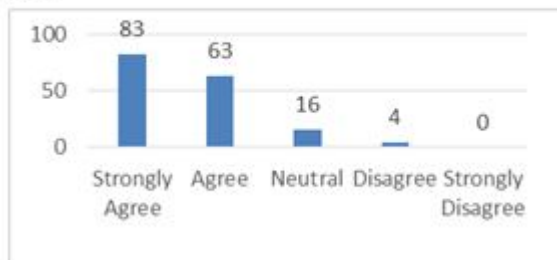
4. Do you think Internet Banking saves your time and provides convenience?



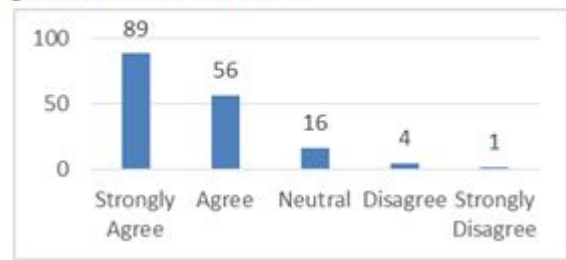
7. Do you think online transactions are accurate?



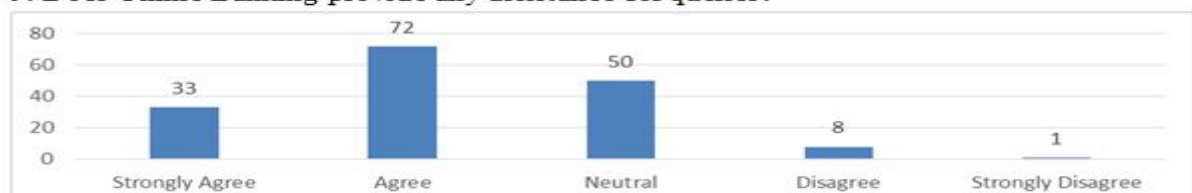
5. Do you think internet banking is easy to use?



8. Do you feel that online banking provides 24/7 services?



9. Does Online Banking provide any assistance for queries?



Question 10 and 14 reveal that; On one hand, students are convenient with E-banking and on the other hand, they also want to maintain a personal human relationship with the banks. Thus, this again reveals that traditional and E-banking services are parallel to each other.

Security: Figure 10 shows that 90 respondents out of 167, felt that their personal information would be disclosed to the third party and also there is a threat from hackers, who can hack personal information for fraud or theft. Only a small proportion of respondents (25 students) trusted the security system of E-banking services with regard to their personal information

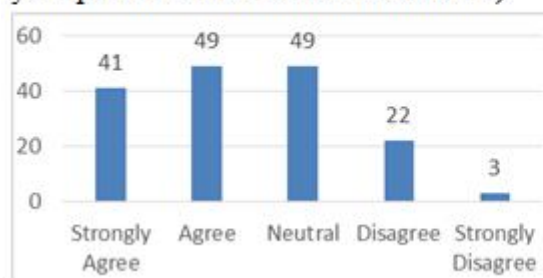
Trust: The Figure 11 depicts whether they trust internet services while managing money. 102 students among 167 agreed while 21 do not trust internet services when it comes to managing, their money.

Availability of Services: Among the total respondents, 76 students agreed that E-banking provides limited services, 43 students feel that E-banking provides all the services. It can be inferred that all the services are not being provided as compared to traditional banks.

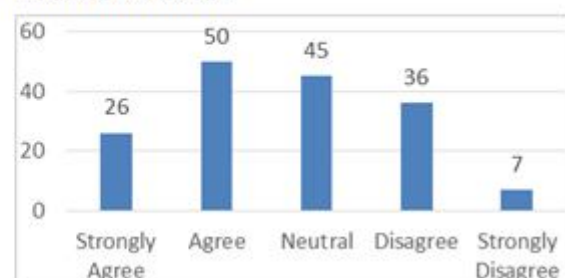
Personal Touch: According to the survey done, 100 students prefer to have a personal human touch with the bank, with respect to the transactions that are complex in nature. This again depicts that though E-banking is easy to use, traditional banking services are also preferred.

Risk: Risk is a major concern for any customer of the bank. Out of the total respondents, 76 agree that E-banking is risky, while 36 disagreed. About 53 students could not provide any opinion on the riskiness of online banking. As the respondents feel unsecured with regard to personal information, they feel it is riskier.

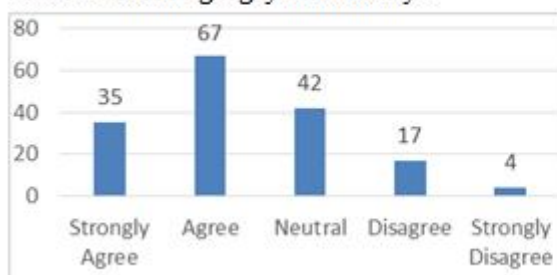
10. Are you afraid of security? (Revealing your personal information to the bank)



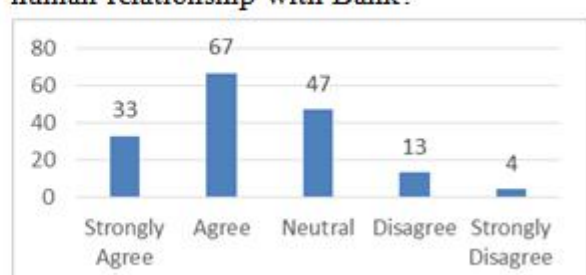
12. Do you think Online Banking provides limited services?



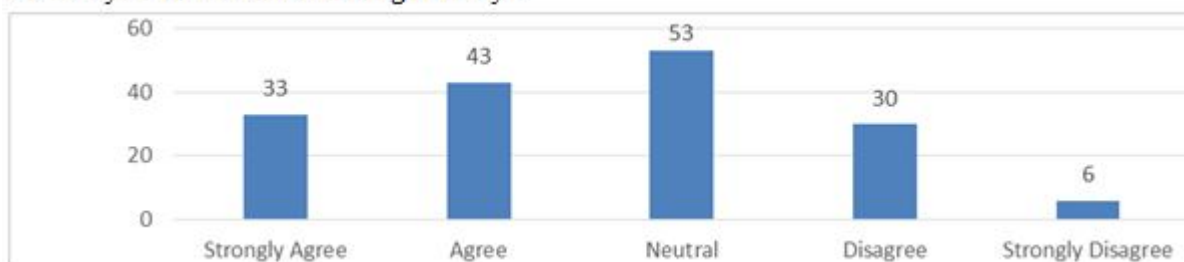
11. Do you trust Internet services when it comes to managing your money?



13. Do you prefer to have a personal human relationship with Bank?



14. Do you feel online banking is risky?

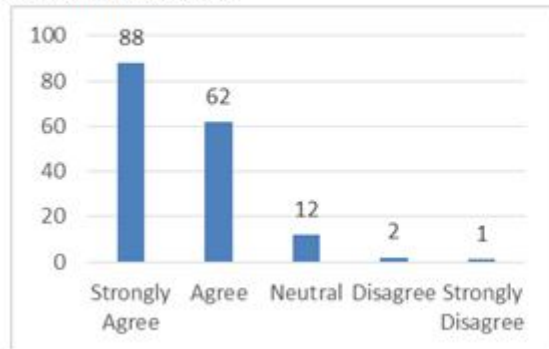


Usage of Internet Banking for Different Services

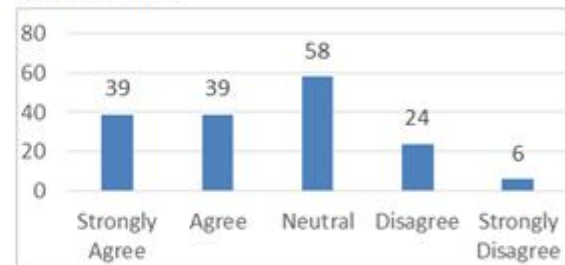
Questions 15 to 19 shows the purpose of using E-banking services i.e., for making fee payments, online shopping, transferring money etc., and the students are agreeing for the same. Most of the students prefer to use E-banking for recharges, Online shopping, booking movie tickets, followed by checking the bank balance,

transferring money to different accounts. The least preferred service by the students is Investments. It can be inferred that most of the students do not save any money out of their earnings or pocket money provided by their parents or guardian. Further Figure 20 enquires the respondents whether they use banks services if banks go for 100% online; where the respondents are neutral.

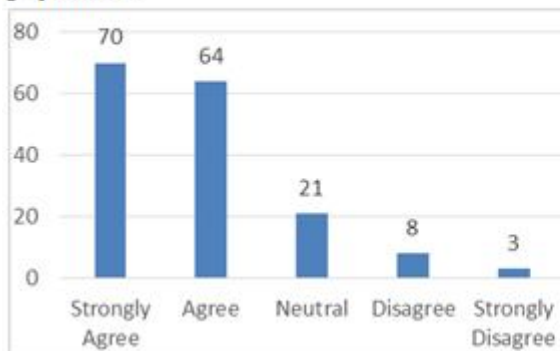
15. Do you prefer Online Banking for checking balance?



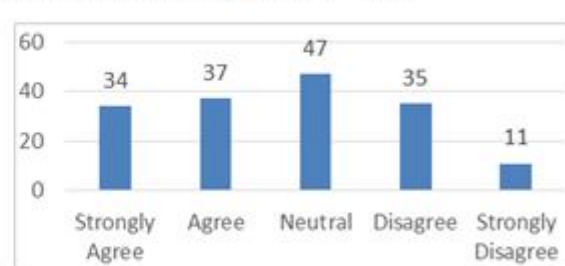
19. Do you make online banking to make investments?



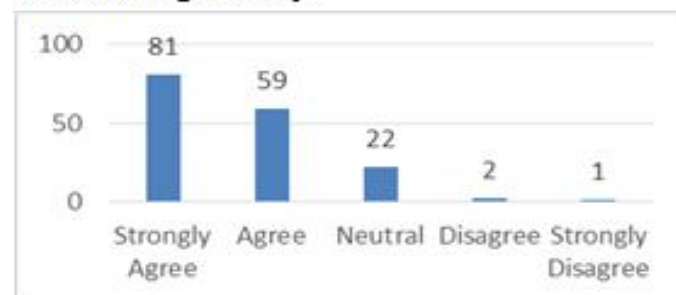
16. Do you prefer Online Banking for fee payments?



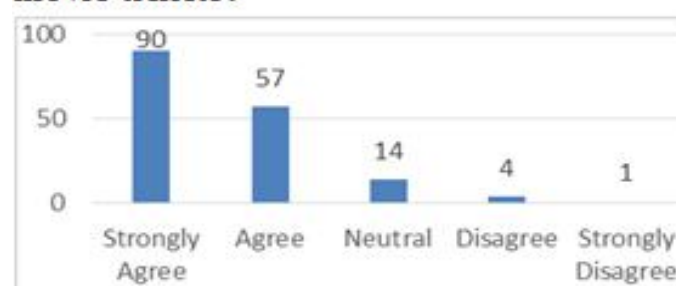
20. Would you use the bank, if it offers Internet Banking services only?



17. Do you prefer Online banking for transferring money?



18. Do you prefer Online banking for recharges, Online shopping, booking movie tickets?



CONCLUSION

Our findings disclose that students are adaptable for internet banking services. They support the banks with E-banking as they feel that online transactions are efficient, accurate, reliable and accessible. It provides assistance to many transactions such as fee payments, online shopping, recharges and investments anytime and anywhere. Respondents prefer to maintain a personal human relationship with the banks when the transactions are complex in nature. E-banking saves a lot of time to the customers as well as bank employees. It helps in the rapid development of India by updating to the technology every now and then.

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WEBSITE

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6. <https://www.amarujala.com/photo-gallery/technology/tip-of-the-day/internet-banking-6-things-you-should-never-do>

INNOVATIVE STRATEGY –A CASE STUDY OF PATANJALI COMPANY

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ABSTRACT

Patanjali, one of the fastest growing consumer companies of Northern India with more than 700 products that are safer, healthier, deep rooted in Indian tradition i.e. Ayurveda. Patanjali was started in the year 1995, under the partnership of Ramdev and Balkrishna. It was found that their medicines were so popular that Ramdev and Balkrishna decided to add and diversify their medicine in other products. Thus Patanjali Ayurveda was born as a private company in 2006. Patanjali is the fastest growing company valued at 3000 crore and generated a revenue of Rs 20000 crore for the year 2018. Hindustan Uniliver and P&G are the FMCG companies whose market share has been potentially affected by Patanjali. This paper is an attempt to examine the various potential strategies adopted by Patanjali to give stiff competition to others in the market. Subsequently, Patanjali has estimated to cross the annual revenue of India's largest packaged goods company Hindustan Unilever Ltd by 31 March 2019.

Keywords: Strategies, Product Line, Revenue

INTRODUCTION

In today's global market, it is very crucial to have a unique identity and to stand apart from the crowd and brand helps us to achieve that. Creation of Brand is one of the most important marketing practices now-a-days, which create a unique identity to the product. In simple term the expression "brand creation" can be define as a promise made by the company to the customers. Brand is a set of marketing and communication methods which help the individual producer to distinguish their product from the competitors. Brand creation helps to charge maximum amount on a product. As per the survey made by Nielson's Global New Product Innovation Survey, 59% of the consumers prefer to buy product with brand name and familiar brand. Effective brand strategy gives you major share in the market as strategic branding builds strong brand equity to the company. Brand building or brand creation is a huge process which includes promotional strategies, advertising and marketing campaign to create a unique identity in the market. These strategies pay a major role in creating a brand and they are also considered as a pillar for brand creation. There is no defined way of brand building or brand creation. Process of brand building depends on the kind of company and the products. Now-a-days creation of brand is crucial part of the business unit in order to survive in the competitive market. They need to use creative and innovative strategies in case advertising, marketing and promotional there to build a successive brand. Effective strategies to be used to create a brand which will lead you stay focused on your mission and vision. It is the best medium for your organization to connect emotionally with the customer.

NEED AND SIGNIFICANCE OF THE STUDY:

Patanjali is the fastest growing company valued at 3000 crore and generated a revenue of Rs 20000 crore for the year 2018. A Company with good prospects to grow in future is dangerous to its competitors. The various strategies adopted by the company are

- Strategic distribution tie-ups with Future Group and Reliance Retail
- Tie-ups with DRDO for transfer of technology in herbal supplements and food products used at high altitude.
- Loyal consumer base and competitive pricing (low pricing strategy)
- Appeal to rural-urban "aspiration and conservatism-driven" consumers
- Anti foreign campaign
- Indian made
- No financial burden and minimal advertising budget
- Approached retailers and portrayed advertisements stating that Patanjali's goods are in line with Mahatma Gandhi's dream of promoting Indian made goods.

In this scenario, a study to better understand the success story and learn its effectiveness becomes imperative. Also to understand the strategies adopted by Patanjali for brand creation.

OBJECTIVES

- To examine the strategies adopted by Patanjali to capture the market
- To analyze the various strategies adopted and its effectiveness

RESEARCH METHODOLOGY ADOPTED

- **Primary:** It is collected by administering questionnaire to the consumers of Patanjali products
- **Secondary Data:** It is collected from wide range of authenticated sources.
- **Sample design:** The Sample Selected is exclusively the consumers of Patanjali Products. In order to reach them an online questionnaire through **Google form** is been sent. Around 200 responses were received. Out of which 150 are found to be valid for analysis. Hence, the sample size for the present study is 150.
- **Techniques Adopted and Analysis:** SPSS – statistical Software is been used to process the data. Chi-Square test is been applied to test the association of various strategies with gender. Further, analysis is been drawn based upon the results so derived.

DATA ANALYSIS AND INTERPRETATION:

The data analysis is done with help of SPSS – statistical Software which is been used to process the data and apply test. Chi-Square test is been applied to test the association of various strategies with gender. Further, analysis is been drawn based upon the results so derived

ASSOCIATION OF GENDER V/S REASONS FOR SHIFTING TO PATANJALI PRODUCTS

GENDER	GENDER V/S REASONS FOR SHIFTING TO PATANJALI PRODUCTS			TOTAL
	Price	Easy availability	Better quality	
MALE	18(12%)	12(9.1%)	30(20%)	60(40%)
FEMALE	17(11.33%)	15(8.91%)	58(38.66%)	90(60%)
TOTAL	35(23.33%)	27(18.01%)	88(58.66%)	150(100%)

CHI –SQUARE TEST – 0.182

Source: Primary Data

- Out of 61(41.1%) of males respondent, 18(12.3%) of them shifting to Patanjali products because of price charged, 12(8.2%) for easy availability and 30(20.5%) due to its better quality.
- Out of 89(59.3%) of females respondent, 17(11.6%) of them shifting to Patanjali products because of price charged, 13(8.9%) for easy availability and 56(38.4%) due to its better quality.

As the chi-square test is 0.182 which is less than 0.05 thus H1 is accepted that means there is a relationship between gender and factors influencing purchases

ASSOCIATION OF GENDER V/S MOSTLY USED PATANJALI PRODUCTS

Gender	GENDER V/S MOSTLY USED PATANJALI PRODUCTS.							Total
	Dairy products	Dental care products	Ayurveda medicines	Hair care products	soaps	Beauty care products	other	
Male	15(24.1%)	33(53.2%)	22(35.4%)	17(27.4%)	28(45.1%)	19(30.6%)	11(17.74)	60(40%)
Female	16(17.7%)	37(41.1%)	18(20%)	32(35.5%)	30(33.3)	33(36.6%)	14(15.5%)	90(60%)
Total	31(20.3%)	70(46.0%)	40(26.3%)	49(32.2%)	58(38.1%)	52(34.2%)	25(16.4%)	150(100%)

CHI –SQUARE TEST – 0.623

Source: Primary Data

- Out of 62(41.3%) of male responders, 15(24.1%) uses dairy products, 33(53.2%) uses dental care products, 22(35.4%) uses Ayurveda medicines, 11(27.4%) uses hair care products, 28(45.1%) uses soaps, 19(30.6%) uses beauty care products and 11(17.74%) other.
- Out of 90(59.2%) of female responders, 16(17.7%) uses dairy products, 37(41.1%) uses dental care products, 18(20%) uses Ayurveda medicines, 32(33.3%) uses hair care products, 30(33.3%) uses soaps, 33(36.6%) uses beauty care products and 14(15.5%) other.

As the chi-square test is 0.623 which is less than 0.05 thus H1 is accepted that means there is a relationship between gender and mostly used products of Patanjali.

ASSOCIATION OF GENDER V/S FACTORS INFLUENCING PURCHASE

GENDER	GENDER V/S FACTORS INFLUENCING PURCHASE				TOTAL
	Advertisement	Word of mouth	Relatives and friends	Others	
MALE	17(11.3%)	13(8.7%)	25(16.7%)	6(4.0%)	61(40.7%)
FEMALE	25(16.7%)	18(12.0%)	38(25.3%)	8(5.3%)	89(59.3%)
TOTAL	42(28.0%)	31(20.7%)	63(42.0%)	14(9.3%)	150(100%)

CHI- SQUARE TEST : 0.0995

Source: Primary Data

- Out of 61(41.7%) of male responders, 17(11.3%) people's purchasing decision is influenced by advertisement, 13(8.7%) by word of mouth, 25(16.7%) by relatives and 6(4.0%) as others.
- Out of 89(59.3%) of female responders, 25(16.7%) people's purchasing decision is influenced by advertisement, 18(12%) by word of mouth, 38(25.3%) Relatives and friends, 8(5.3%) as others.

As the chi-square test is 0.0995 which is less than 0.05 thus H₁ is accepted that means there is a relationship between gender and factors influencing purchases

ASSOCIATION OF GENDER V/S FACTORS CONSIDERED WHILE USING PATANJALI PRODUCTS

GENDER	GENDER V/S factors considered while using Patanjali products.			TOTAL
	Attractive packing	Ingredient	others	
MALE	9(5.99%)	43(28.66%)	8(5.33%)	60(40%)
FEMALE	7(4.46%)	77(51.34%)	6(4%)	90(60%)
TOTAL	16(10.45%)	120(80%)	14(9.33%)	150(100%)

CHI- SQUARE TEST : 0.61

Source: Primary Data

- Out of 58(39.7%) of male responders, 9(6.2%) consider attractive packing as a factors while purchase Patanjali products, 43(28.8%) ingredient and 7(4.8%) as other.
- Out of 89(59.3%) of responders, 5(3.4%) consider attractive packing as a factors while purchase Patanjali products, 77(52.7%) ingredient and 6(4.1%) as other.

As the chi-square test is 0.61 which is less than 0.05 thus H₁ is accepted that means there is a relationship between gender and factors influencing purchases

GENDER V/S SUPREMACY OF PATANJALI OVER OTHERS

GENDER	AGE AND PATANJALI PRODUCTS		TOTAL
	YES	NO	
MALE	38(26%)	24(14%)	62(40%)
FEMALE	49(34%)	39(26%)	88(60%)
TOTAL	87(58%)	63(42%)	150(100%)

CHI- SQUARE TEST : 0.353

Source: Primary Data

- Out of 60(40.5%) male, 38(25.7%) of male believe that there is supremacy of Patanjali products over others were as 22(14.9%) of men doesn't believe so.
- Out of 88(59.5%) female 49(55.2%) of female believe that Patanjali has supremacy over others, were as 5(2.9%) of female are doesn't believe so.

As the chi-square test value is 0.353 which is less than 0.05, thus H₁ is accepted and H₀ is rejected, and we conclude that there is a relationship between gender and supremacy of Patanjali products over others.

GENDER V/S RECOMMENDING PATANJALI TO OTHER

GENDER	GENDER V/S RECOMMENDING PATANJALI PRODUCTS TO OTHER		TOTAL
	YES	NO	
MALE	43(27.99%)	17(12.01%)	60(40%)
FEMALE	64(43.34%)	26(16.66%)	90(60%)

TOTAL	107(71.33%)	42(28.67%)	150(100%)
CHI- SQUARE TEST : 0.992			

Source: Primary Data

- Out of 59(39.6%) male, 42(28.2%) of male will recommend Patanjali products to others were as 17(11.4%) of men will not recommend.
- Out of 90(60.4%) female 64(43.0%) of will recommend Patanjali products to were as 43(28.9%) of female will not recommend.

As the chi- square test value is 0.992 which is less than 0.05, thus H1 is accepted and H0 is rejected, and we conclude that there is a relationship between gender and recommendation of Patanjali products to others.

GENDER V/S RATING OF PATANJALI PRODUCTS

GENDER	GENDER V/S RATING OF PATANJALI PRODUCTS					TOTAL
	Very good	Good	Neutral	Bad	Very bad	
MALE	13(8.7%)	32(21.3%)	1(7.3%)	0(0.0%)	4(2.7%)	60(40%)
FEMALE	14(9.3%)	36(24%)	33(22%)	2(1.3%)	5(3.3%)	90(60%)
TOTAL	27(18%)	68(45.3%)	44(29.3%)	2(1.3%)	9(6.0%)	150(100%)
CHI- SQUARE TEST : 0.104						

Source: Primary Data

- Out of 60(40.0%) of male responders 13(8.7%) responders rated of Patanjali products as very good, 32(21.3%) as good, 11(7.3%) as neutral, 0(0.0%) as bad and 4(2.7%) as very bad. follow
- Out of 90(60%) of female responder, 14(9.3%) responders rated of Patanjali products as very good, 36(24%) as good, 36(24%) as neutral, 2(1.3%) as bad and 5(3.3%) as very bad.

As the chi-square test is 0.104 which is less than 0.05 thus H1 is accepted that means there is a relationship between gender and rating of Patanjali products

FINDINGS AND SUGGESTIONS

The study identified the fact that people are accepting Patanjali' products because of its herbal nature, good quality and reasonable price compare to its other companies products. Patanjali' strategy of entering all the segments of FMCG sector, also unique in India and may be in the world, where a single infant domestic company is taking numbers of world giant MNCs on its horns. Both domestic and international big companies are afraid-off for the success of Patanjali Ayurveda Ltd, a complete Indian company in FMCG sector. Patanjali should come up with more innovative products to attract the youths. The consumers are more health conscious about obesity, tensions and adverse health effects from food and other ingredients. In this scenario Patanjali has positioned them in a right path and continuing the delivery of quality products will definitely help them to reach the high point of success.

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4. The title of the paper should be in capital letters, bold, size 16” and centered at the top of the first page. The author(s) and affiliations(s) should be centered, bold, size 14” and single-spaced, beginning from the second line below the title.

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5. The abstract should summarize the context, content and conclusions of the paper in less than 350 words in 12 points italic Times New Roman. The abstract should have about five key words in alphabetical order separated by comma of 12 points italic Times New Roman.
6. Figures and tables should be centered, separately numbered, self explained. Please note that table titles must be above the table and sources of data should be mentioned below the table. The authors should ensure that tables and figures are referred to from the main text.

EXAMPLES OF REFERENCES

All references must be arranged first alphabetically and then it may be further sorted chronologically also.

• Single author journal article:

Fox, S. (1984). Empowerment as a catalyst for change: an example for the food industry. *Supply Chain Management*, 2(3), 29–33.

Bateson, C. D., (2006), ‘Doing Business after the Fall: The Virtue of Moral Hypocrisy’, *Journal of Business Ethics*, 66: 321 – 335

• Multiple author journal article:

Khan, M. R., Islam, A. F. M. M., & Das, D. (1986). A Factor Analytic Study on the Validity of a Union Commitment Scale. *Journal of Applied Psychology*, 12(1), 129-136.

Liu, W.B, Wongcha A, & Peng, K.C. (2012), “Adopting Super-Efficiency And Tobit Model On Analyzing the Efficiency of Teacher’s Colleges In Thailand”, *International Journal on New Trends In Education and Their Implications*, Vol.3.3, 108 – 114.

- **Text Book:**

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* (3rd ed.). New York: McGraw-Hill.

S. Neelamegham," Marketing in India, Cases and Reading, Vikas Publishing House Pvt. Ltd, III Edition, 2000.

- **Edited book having one editor:**

Raine, A. (Ed.). (2006). *Crime and schizophrenia: Causes and cures*. New York: Nova Science.

- **Edited book having more than one editor:**

Greenspan, E. L., & Rosenberg, M. (Eds.). (2009). *Martin's annual criminal code: Student edition 2010*. Aurora, ON: Canada Law Book.

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- **Chapter in edited book having more than one editor:**

Young, M. E., & Wasserman, E. A. (2005). Theories of learning. In K. Lamberts, & R. L. Goldstone (Eds.), *Handbook of cognition* (pp. 161-182). Thousand Oaks, CA: Sage.

- **Electronic sources should include the URL of the website at which they may be found, as shown:**

Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), 38-48. Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap>

- **Unpublished dissertation/ paper:**

Uddin, K. (2000). A Study of Corporate Governance in a Developing Country: A Case of Bangladesh (Unpublished Dissertation). Lingnan University, Hong Kong.

- **Article in newspaper:**

Yunus, M. (2005, March 23). Micro Credit and Poverty Alleviation in Bangladesh. *The Bangladesh Observer*, p. 9.

- **Article in magazine:**

Holloway, M. (2005, August 6). When extinct isn't. *Scientific American*, 293, 22-23.

- **Website of any institution:**

Central Bank of India (2005). *Income Recognition Norms Definition of NPA*. Retrieved August 10, 2005, from <http://www.centralbankofindia.co.in/home/index1.htm>, viewed on

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- To encourage scholarly work in research
- To provide a forum for discussion of problems related to educational research
- To conduct workshops, seminars, conferences etc. on educational research
- To provide financial assistance to the research scholars
- To encourage Researcher to become involved in systematic research activities
- To foster the exchange of ideas and knowledge across the globe

Services Offered

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